AMERICAN ASSOCIATION OF VETERINARY LABORATORY DIAGNOSTICIANS EVENT

67th annual meeting, meeting, Oct. 10-16, 2024, Nashville, Tennessee.

AAVLD AWARDS

E.P. Pope Award

Dr. Kristy Pabilonia, DVM, PhD

Kristy Pabilonia, DVM, PhD, is a Professor in the Department of Microbiology, Immunology and Pathology at Colorado State University (CSU). She currently serves as the Director of Clinical Diagnostics, which includes serving as Director of the CSU Veterinary Diagnostic Laboratories. Kristy teaches veterinary and graduate student classes and conducts infectious disease research projects. She is board certified by the American College of Veterinary Microbiologists.

Read more… *Biography*

Distinguished Service Award

Dr. Bruce Akey, BS, MS, DVM

Dr. Akey first joined AAVLD in 1990 and has served in numerous leadership positions over the years, including as President in 2000. He is a regular and gregarious attendee at the annual meeting and can be spotted in many scientific sessions and AAVLD and USAHA committee meetings. His passions include government relations, laboratory data, and building laboratories, and through these passions he has substantially enriched and advanced AAVLD. I will focus primarily on his contributions to AAVLD via government relations and laboratory data.

Read more… *Biography*

Outstanding Performance Award for Diagnostic Services

Ms. Kristin Zuzek, BS Biology, MS Biology

Kristin Zuzek grew up in Racine, Wisconsin and earned her undergraduate degree in Biology with minors in Chemistry and Animal Science at the University of Wisconsin-River Falls. She worked as a Molecular Virology Research Assistant and earned her graduate degree in Biology/Molecular Biology at the University of Wisconsin-Eau Claire. Prior to her current employment at the Wisconsin Veterinary Diagnostic Laboratory (WVDL), she worked in private industry as Quality Assurance Laboratory Supervisor, Quality Manager, and Technical Director of Quality Assurance/Research and Development.

Read more… *Biography*

AAVLD President's Award

Hemant Kashinath Naikare, BVSc &AH, MVSc, PhD, Diplomat ACVM, MBA

Dr. Hemant Kashinath Naikare, a native of Mumbai, India, is a distinguished board-certified veterinary microbiologist with over 25 years of experience in diagnostic microbiology. His expertise spans both classical and modern methodologies for diagnosing diseases in livestock, companion animals, zoonotic pathogens, and ensuring food safety and public health.

Read more… *Biography*

Life Membership Award

Dr. Jeff Hayes, DVM MS

Dr. Jeff Hayes received his DVM from The Ohio State University College of Veterinary Medicine in 1982. That same year he began his career with the Ohio Department of Agriculture Animal Disease Diagnostic Laboratory as a necropsy diagnostician, a career that lasted more than 36 years, retiring in June 2020 after a 12-year tenure as the Section Head of the Pathology and Histology Sections. He earned his master's degree in veterinary Pathobiology also from OSU CVM in 2000, working on dual infection of pigs with PRRSV and PRCV under the guidance of Drs. Linda Saif and Paul Stromberg.

Read more… *Biography*

JVDI Best Full Scientific Report

Emily M. Birckhead,

This research was undertaken as part of Emily's combined PhD and pathology residency at Charles Sturt University, Australia. Emily is now working as a veterinary clinical pathologist.

JVDI Best Brief Report

Andrew D. Miller, DVM, DACVP

Andrew D. Miller is a graduate of Cornell University (BS '01, DVM '05) and a board certified anatomic veterinary pathologist (Dipl. ACVP '08). He is currently an Associate Professor in the Department of Population Medicine and Diagnostic Sciences and laboratory director of the Section of Anatomic Pathology at Cornell University College of Veterinary Medicine and the New York State Veterinary Diagnostic Laboratory.

Read more… *Biography*

Scientific Session Oral Presentation Award-1st Place

Brooklyn Cauwels

My name is Brooklyn Cauwels, and I am a Diagnostic Associate II in the Serology section of the Iowa State University Veterinary Diagnostic Laboratory. I received a BS in Biology, minor in Chemistry from ISU and have completed my first year of graduate school at ISU, pursuing a MS in Immunobiology. Since starting in my position, I have learned many serological assays across multiple testing platforms such as ELISAs, Luminex FMIAs, IFAs and agglutination assays.

Read more… *Biography*

Scientific Session Oral Presentation Award-2nd Place

MaRyka Smith,

MaRyka Smith is currently at Center for Outcomes Research and Epidemiology within the College of Veterinary Medicine at Kansas State University. I am a PhD Candidate under Dr. Mike Sanderson. I completed my Doctor of Veterinary Medicine in May 2024 and hope to finish my PhD next fall. The core of my dissertation is epidemiology of Foot and Mouth Disease. My projects have specifically focused on reviewing biosecurity methods and assessing traceability of livestock in the event of an outbreak with computer modeling. I am exceedingly grateful for being selected for this award. I really enjoyed this conference and meeting so many future colleagues. I can't wait to attend again in the future.

Biography

Scientific Session Best Poster Award -1st Place

Kendall Mara

Kendall Mara received her BS in Microbiology from the University of Missouri – Columbia and is now a second-year PhD student in the Department of Microbiology, Genetics, and Immunology at Michigan State University. She conducts research under the guidance of Dr. Kimberly Dodd and Dr. Rinosh Mani at the MSU Veterinary Diagnostic Laboratory studying antimicrobial resistance in veterinary Mycoplasmas.

Biography

Scientific Session Best Poster Award-2nd Place

Calvin ChengYu Ko

Calvin Ko is a mycoplasmologist and a veterinary pathologist dedicated to swine disease research and diagnostics. His specialties include bacterial culture and modern diagnostic tools application for fastidious Mollicutes and is now a Graduate Assistant Researcher and Anatomic Pathology Resident at Iowa State University. Currently, he is working with Dr. Rachel Derscheid and Dr. Pablo Pineyro with a focus on diagnostic method development, evaluation, and optimization in swine Mycoplasma, with training in diagnostic pathology.

Biography

Pioneer in Virology Award

Dr. Dick Hesse, BA, MS, PhD

Professor

Director of Diagnostic Virology

May 2002 to Present - Appointed as Assistant Professor/Collaborator in the Department of Veterinary Microbiology and Preventive Medicine at Iowa State University.

February 2005 to Present - Appointed as Adjunct Assistant Professor in the Department of Molecular Biosciences at the University of Kansas.

July 2006 to Present – Associate Professor, Promoted to Professor 2011, Director of Diagnostic Virology, September 2019 to Present – Professor Emeritus, Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, Kansas.

Read more… *Biography*

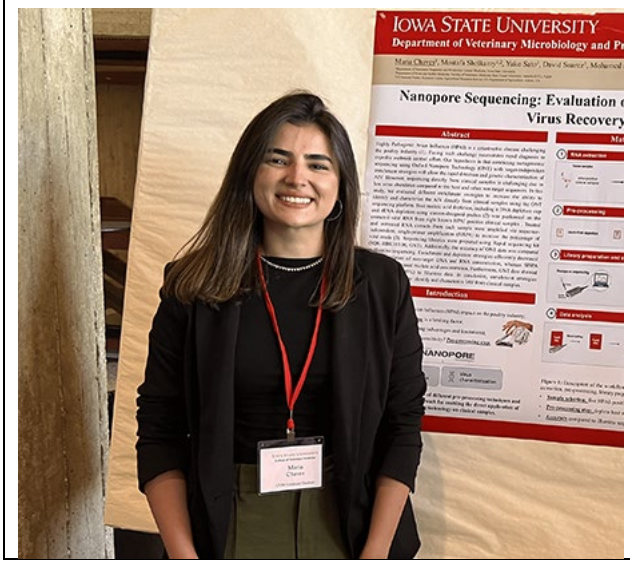
Award for Excellence in Diagnostic Veterinary Microbiology Supported by BIOMIC

Sara Lawhon

Dr. Sara Lawhon is a professor at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences. After receiving her DVM from Texas A&M University she completed her residency in Infectious Diseases and PhD at North Carolina State University, then became a diplomate of the American College of Veterinary Microbiologists. Dr. Lawhon serves as the director of the Clinical Microbiology Laboratory at the Texas A&M University Veterinary Medical Teaching Hospital and she is an award-winning teacher of veterinary and graduate students. Her clinical and research interests are focused on antimicrobial resistance in zoonotic pathogens. She also serves as a voting member of the VAST Subcommittee of CLSI. Dr. Lawhon is grateful for the generosity of AAVLD colleagues in sharing their expertise and knowledge.

Biography

Molecular Diagnostics & Bioinformatics Oral Presentation Award



Maria Chaves

Maria Chaves is a PhD student in the Veterinary Microbiology and Preventive Medicine Department at Iowa State University. Maria got her DVM at the Universidade Federal de Minas Gerais (Brazil) in 2022 and moved to the US to pursue her passion for research and improving diagnostic techniques. Her work is focused on applying sequencing technologies towards identification and characterization of infectious agents.

Biography

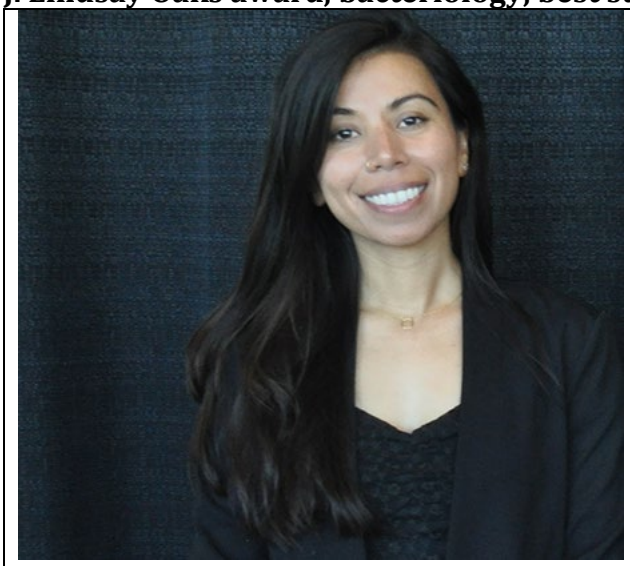
Molecular Diagnostics & Bioinformatics Poster Presentation Award

Hayley Masterson

Dr. Hayley Masterson is a veterinary resident in clinical microbiology at the Washington Animal Disease Diagnostic Laboratory and a PhD candidate in Immunology and Infectious Disease at Washington State University in Pullman, Washington. She is passionate about parasitology and tick-transmitted diseases, with a special interest in bovine babesiosis. She hopes to continue working in diagnostic medicine and research when she completes her program. One of her main goals is to become boarded in veterinary parasitology so that she can continue to aid diagnostic laboratories in the development of molecular diagnostic options for identifying and diagnosing parasitic diseases.

Biography

J. Lindsay Oaks award, bacteriology, best student molecular biology presentation-poster



Maria Hakimi

Maria Hakimi earned her B.S. in Microbiology from Iowa State University (ISU) in 2017. After gaining practical experience in a food microbiology laboratory, she worked in the Bacteriology section of the ISU Veterinary Diagnostic Laboratory. She completed her Master of Science in Veterinary Microbiology at ISU in 2023.

Read more... Biography

Walker Award for best oral bacteriology presentation

Blaire MacNeill

Dr. Blaire MacNeill was raised in sunny Las Vegas, Nevada. She earned her Doctor of Veterinary Medicine from Colorado State University in 2023. Throughout veterinary school, she worked as a laboratory technician in the bacteriology section of the CSU Veterinary Diagnostic Laboratory. She is currently pursuing a Clinical Microbiology Residency and Ph.D. at Colorado State University under the mentorship of Dr. Joshua Daniels. Her research interests include antimicrobial resistance and bacteriophage therapy development for multidrug resistant infections in veterinary patients. Outside of her academic pursuits she enjoys hiking in the mountains of Colorado, reading novels, and spending time with her two cats Nugget and Squish.

Biography

Love Award for best bacteriology poster

Calvin C. Ko

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Biography

Dr. David Bemis Microbiology Trainee Travel Award

Paarthiphan Elankumaran

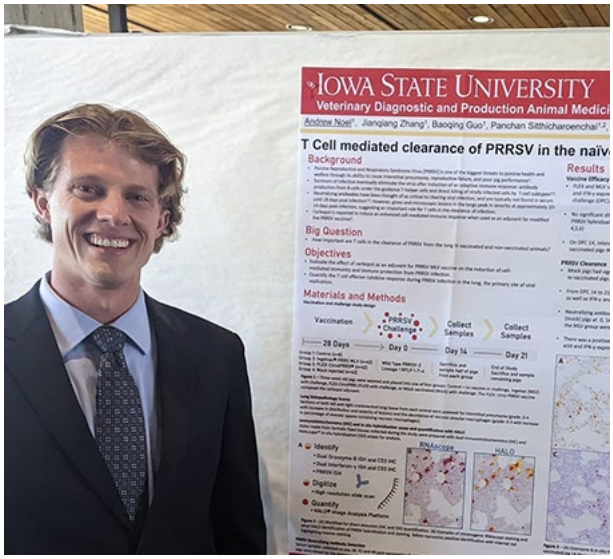
Postdoctoral Research Associate,

Veterinary Diagnostic and Production Animal Medicine (VDPAM), Iowa State University.

Dr. Paarthiphan Elankumaran is currently pursuing his postdoctoral research in microbial genomics at Iowa State University, Ames, Iowa under the supervision of Professor Ganwu Li.

Read more... Biography

Pathology slide presentation awards First Place



Andrew Noel

I am currently in my third year of veterinary pathology residency at Iowa State University. My favorite part of this program is combining what I have learned as a resident with my private practice experience to provide valuable information to our diagnostic laboratory clients and instruct veterinary students in class, lab, and on the necropsy floor.

Read more… Biography

Pathology slide presentation awards Second Place

Calvin C. Ko

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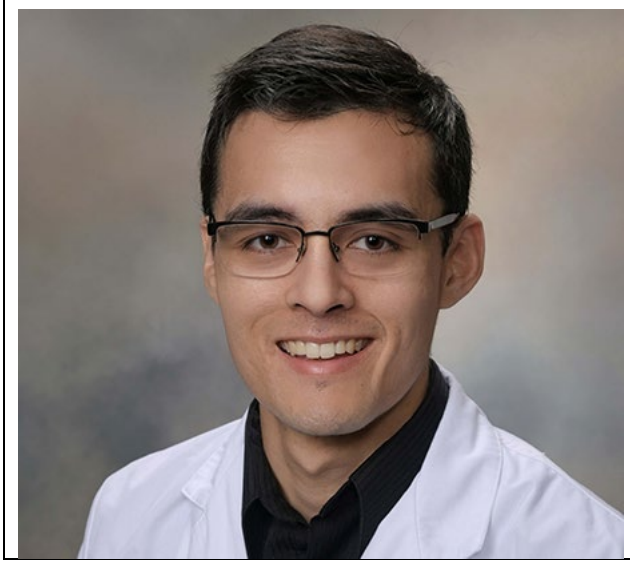
Biography

Pathology slide presentation awards Third Place

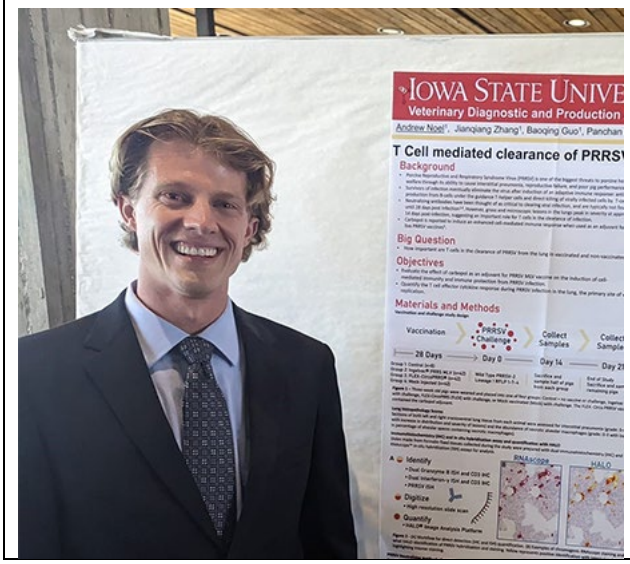


Trevor Arunsiripate

Trevor is a second-year anatomic pathology resident and PhD student at Iowa State University's Veterinary Diagnostic Laboratory. He received his DVM from Iowa State in 2023 and has an interest in food animal pathology and research. His PhD thesis focuses on the respiratory clinical manifestation in porcine hemagglutinating encephalomyelitis virus (PHEV). After his training he will enjoy a career in veterinary pathology and wherever that journey takes him.

Read more… Biography

AAVLD/ACVP Resident Diagnostic Pathology Travel Award



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Read more… *Biography*

ACVP/AAVLD Resident Diagnostic Pathology Travel Award

Emily Blackwell

Dr. Emily Blackwell is a third-year trainee in the combined veterinary anatomic pathology residency and PhD program at Johns Hopkins University. Her current research is focused on early cancer detection with Dr. Jonathan Dudley and the Molecular Diagnostics Research and Development group. She is also interested in Elasmobranch pathology and enjoys exploring new diagnostic methods for exotic animals.

Biography

Pathology Oral Presentation award

Nora Gardner

Dr. Nora Gardner is a second-year anatomic pathology resident at North Carolina State University College of Veterinary Medicine. She attended Ross University College of Veterinary Medicine and completed her clinical year at NCSU CVM in 2023. Her primary interest is ocular pathology, but she also enjoys ruminants and equids. She is currently interested in pursuing a career in a diagnostic lab, but she also loves teaching and may consider a career in academia. Outside of pathology she loves reading, watching movies and TV (RABID Star Trek fan), and playing an eclectic group of instruments.

Biography

Trainee Travel Awardees

MaRyka Smith

My name is MaRyka Smith, I am from the Center for Outcomes Research and Epidemiology within the College of Veterinary Medicine at Kansas State University. I am a PhD Candidate under Dr. Mike Sanderson. I completed my Doctor of Veterinary Medicine in May 2024 and hope to finish my PhD next fall. The core of my dissertation is epidemiology of Foot and Mouth Disease. My projects have specifically focused on reviewing biosecurity methods and assessing traceability of livestock in the event of an outbreak with computer modeling. I am exceedingly grateful for being selected for this award. I really enjoyed this conference and meeting so many future colleagues. I can't wait to attend again in the future.

Read more… Biography

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Dr. Hayley Masterson is a veterinary resident in clinical microbiology at the Washington Animal Disease Diagnostic Laboratory and a PhD candidate in Immunology and Infectious Disease at Washington State University in Pullman, Washington. She is passionate about parasitology and tick-transmitted diseases, with a special interest in bovine babesiosis. She hopes to continue working in diagnostic medicine and research when she completes her program. One of her main goals is to become boarded in veterinary parasitology so that she can continue to aid diagnostic laboratories in the development of molecular diagnostic options for identifying and diagnosing parasitic diseases.

Read more… Biography

Brooklyn Cauwels

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Read more… Biography

Aurelle Yondo

Aurelle Yondo is a third-year Ph.D. student in Comparative Biomedical Sciences at the University of Georgia, with a keen interest in infectious diseases, molecular diagnostics, and global health. Building on a strong foundation in biomedical sciences, gained through her B.Sc. from the University of Douala in Cameroon and her MSc from the University of Georgia, Aurelle has honed her expertise in a wide range of laboratory testing techniques.

Read more… Biography

Sai Narayanan

Sai Narayanan is an Anatomic pathology resident at the College of Veterinary Medicine at Oklahoma State University. Besides residency training, his research focus includes exploring nucleic acid sequencing applications in veterinary diagnostics such as whole genome sequencing, microbiome, metagenome-based pathogen detection using perl, python and machine learning neural networks.

Read more… Biography

Berenice Munguia-Ramirez

Dr. Berenice Munguía-Ramírez obtained her DVM degree in México in 2019. She completed her MSc in Veterinary Preventive Medicine at Iowa State University (ISU) in 2022, and currently, she is a PhD student in Population Sciences in Animal Health at ISU under the mentorship of Dr. Zimmerman and Dr. Giménez-Lirola.

Read more… Biography

Sydney Epley

Research Assistant
University of Kentucky Veterinary Diagnostic Lab – Toxicology

Graduate Student
Lincoln Memorial University
Sydney Epley is a current graduate student in the Master of Science – Veterinary Biomedical Science program at Lincoln Memorial University and is a prospective veterinary student for the class of 2029 with special interest in equine and small ruminant medicine. As a student at LMU, she prides herself on her activism through her memberships to Veterinarians As One Inclusive Community for Empowerment (VOICE), the Women's Veterinary Leadership Development Initiative (WVLDI), Shelter Medicine Club, Surgery Club, and the American Heartworm Society.

Read more… Biography

Bacteriology/Foundation sponsored

Calvin ChengYu Ko

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Read more… Biography

Epidemiology/Foundation sponsored

Catie Burges

Catie Burgess graduated from the College of William and Mary in May of 2020 with a degree in Biology and Government, and an Honors distinction for research on *Helicobacter pylori* under Mark Forsyth. Following graduation, she joined the newly formed Molecular Diagnostic Laboratory at the Fralin Biomedical Research Institute at Virginia Tech to meet the COVID-19 testing needs of Southwest Virginia.

Read more… Biography

Pathology/Foundation sponsored

Agustin Rebollada-Merino

Department of Population Medicine and Diagnostic Sciences, Section of Anatomic Pathology, College of Veterinary Medicine, Cornell University, Ithaca, NY

Read more… *Biography*

Center of Public and Corporate Veterinary Medicine (CPCVM) Awardees

Stefanie Coates

Lincoln Memorial College of Veterinary Medicine
Class of 2027

Read more… *Biography*

Myranda Gorman

University of Tennessee College of Veterinary Medicine
Class of 2025

Read more… *Biography*

Sarah Landeck

Virginia-Maryland College of Veterinary Medicine
Class of 2027

Read more… Biography

Elizabeth Ohl

The Ohio State University College of Veterinary Medicine
Class of 2026

Read more… Biography

Magdalen Ringley

The Ohio State University College of Veterinary Medicine
Class of 2026

Read more… Biography

Kristy Pabilonia, DVM, PhD, is a Professor in the Department of Microbiology, Immunology and Pathology at Colorado State University (CSU). She currently serves as the Director of Clinical Diagnostics, which include serving as Director of the CSU Veterinary Diagnostic Laboratories. Kristy teaches veterinary and graduate student classes and conducts infectious disease research projects. She is board certified by the American College of Veterinary Microbiologists.

Note from Kristy: Greetings AAVLD members. I've been a member of AAVLD since 2002. I joined as a Microbiology Resident and attending AAVLD meetings helped shape my career. I've enjoyed serving on various AAVLD and USAHA committees (I'm a member of both organizations), including serving as Chair of the Publications Committee from 2010-15. I've also served on a number of NAHLN and USDA committees, such as the NAHLN Methods Technical Working Group and the NPIP General Conference Committee.

I just completed my second term as Secretary-Treasurer of AAVLD. This has been a great experience for me and I'm very interested in serving a third term. This position helps with banking and secretarial activities throughout the organization. Examples include managing AAVLD mutual funds, managing the bank accounts, approving incoming and outgoing payments and coordinating and advising the AAVLD Executive Board and AAVLD committees on assets and spending. There's a lot to learn in this position and it takes a couple of years to understand all of our banking and financial activities, so I would be happy to apply the knowledge I now have to continue to as Secretary-Treasurer. I've loved serving the AAVLD organization and would be pleased to continue these efforts.

UCDAVIS
VETERINARY MEDICINE
California Animal Health & Food Safety Laboratory System

July 12, 2024

Dr. Eric Burrough
Chair, AAVLD Awards Committee

Dear Dr. Burrough,

I would like to nominate Dr. Bruce Akey for the AAVLD Distinguished Service Award for his long service to AAVLD in many roles over the years, with particular attention to his current contributions to AAVLD. These include Co-Chairing the Government Relations Committee and implementing the AAVLD Compensation Surveys in 2022 and 2024.

Dr. Akey first joined AAVLD in 1990 and has served in numerous leadership positions over the years, including as President in 2000. He is a regular and gregarious attendee at the annual meeting and can be spotted in many scientific sessions and AAVLD and USAHA committee meetings. His passions include government relations, laboratory data, and building laboratories, and through these passions he has substantially enriched and advanced AAVLD. I will focus primarily on his contributions to AAVLD via government relations and laboratory data.

Dr. Akey established the AAVLD Government Relations committee during his presidency in 2000 and has Chaired or Co-Chaired it since its inception. Via the Government Relations committee and with the assistance of legislative advocate Brad Mollet, over the past 24 years AAVLD and the NAHLN have become familiar terms on Capitol Hill, and legislators have a much better understanding of the role that AAVLD and member labs play in protecting animal & public health and the food supply. This has translated into increased financial support for the NAHLN (and by extension, many AAVLD member labs) as well as increased recognition of the importance of veterinary diagnostics. In addition, legislators and their staff have become aware of the expertise available in AAVLD member labs and are increasingly comfortable reaching out to AAVLD members as informational resources.

Dr. Akey's interest in laboratory data encompasses the collection, categorization, storage, and analysis of all forms of laboratory and animal health data. In addition to establishing a GIS system for Virginia poultry and standing up multiple LIMS systems at labs he has directed, Dr. Akey has Co-Chaired the AAVLD/USAHA Joint Committee on Animal Health Surveillance & Information Systems and Co-Chaired the National Animal Health Reporting System Steering Committee.

Most recently, he took on the AAVLD Compensation Survey, which collected and summarized information on staffing levels, positions, and compensation across AAVLD member labs. Dr. Akey developed & implemented the Survey, then summarized the data and shared the results.

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https://cahfs.vetmed.ucdavis.edu

The survey was well-designed and flexible enough to work across the breadth of AAVLD labs, yet still provide sufficient level of detail to be useful. The results of the survey have been utilized to justify improvements in staffing and compensation for AAVLD labs.

Through his long service to AAVLD, and specifically through his leadership of the Government Relations Committee and his recent involvement with the Compensation Survey, Dr. Akey has substantially enriched and advanced AAVLD.

Sincerely,

Dr. Ashley E. Hill, DVM, MPVM, PhD
Director - California Animal Health and Food Safety Laboratory
University of California, Davis - School of Veterinary Medicine

Kristin Zuzek grew up in Racine, Wisconsin and earned her undergraduate degree in Biology with minors in Chemistry and Animal Science at the University of Wisconsin-River Falls. She worked as a Molecular Virology Research Assistant and earned her graduate degree in Biology/Molecular Biology at the University of Wisconsin-Eau Claire. Prior to her current employment at the Wisconsin Veterinary Diagnostic Laboratory (WVDL), she worked in private industry as Quality Assurance Laboratory Supervisor, Quality Manager, and Technical Director of Quality Assurance/Research and Development. Kristin began working at the Wisconsin Veterinary Diagnostic Laboratory in 2007, as a Microbiologist, Quality Manager, and currently holds the position of Compliance Director, responsible for Quality Assurance and Safety, and is a member of the WVDL Leadership Team. Kristin joined AAVLD in 2009, has been an Accreditation Audit Pool member since 2019, has participated in 5 accreditation site visits, has chaired the AAVLD QA Committee, and is a member of the AAVLD Accreditation Committee. Kristin is thankful for the collaboration and networking made possible through the AAVLD. Outside of work, Kristin enjoys spending time with her husband, two daughters, and riding dressage.

Biography of Dr. Hemant K. Naikare

Dr. Hemant Kashinath Naikare, a native of Mumbai, India, is a distinguished board-certified veterinary microbiologist with over 25 years of experience in diagnostic microbiology. His expertise spans both classical and modern methodologies for diagnosing diseases in livestock, companion animals, zoonotic pathogens, and ensuring food safety and public health.

Dr. Naikare earned his professional veterinary degree (BVSc & AH) and a Master's in Veterinary Microbiology (MVSc) from Bombay Veterinary College in 1998 and 2000, respectively. He pursued a Ph.D. in Veterinary Biomedical Sciences at Oklahoma State University, graduating in 2005, and later completed an MBA in Marketing at West Texas A&M University in 2014. His commitment to leadership development is reflected in his completion of advanced training programs at the University of Georgia and Texas A&M University.

Dr. Naikare has also contributed to professional governance. He served a three-year term (2012–2015) on the Board of Governors of the American College of Veterinary Microbiologists (ACVM) and was the Southcentral District Representative on the Executive Board of the American Association of Veterinary Laboratory Diagnosticians (AAVLD) from 2013 to 2016.

Currently, Dr. Naikare serves as the Director of the Minnesota Veterinary Diagnostic Laboratory (MVDL) and is a tenured Professor in the Department of Veterinary Population Medicine at the University of Minnesota's College of Veterinary Medicine. In his role at MVDL, he leads a team of more than 100 professionals conducting approximately one million diagnostic tests annually. He manages a $17 million operating budget and oversees two laboratory locations in St. Paul and Willmar, Minnesota. His responsibilities include setting strategic direction, optimizing laboratory operations, fostering innovation, and building collaborative partnerships with academic, government, and industry stakeholders.

Before joining the University of Minnesota, Dr. Naikare held key leadership positions at renowned institutions. He served as the Director of the Tifton Veterinary Diagnostic and Investigational Laboratory and a Professor in the Department of Infectious Diseases at the University of Georgia (2017–2024). From 2007 to 2017, he was the Section Head of Bacteriology and Molecular Diagnostics at the Texas A&M Veterinary Medical Diagnostic Laboratory. Across these roles, he worked extensively with veterinarians and researchers to advance animal health, food safety, microbial pathogenesis, and public health.

Dr. Naikare is a strong advocate for innovation in disease diagnostics and antimicrobial resistance surveillance. His contributions include developing platforms for rapid microbial detection in laboratory and point-of-care settings. He has served on the AAVLD editorial board for the *Journal of Veterinary Diagnostic Investigation* and reviews for numerous peer-reviewed journals. Between 2015 and 2020, he was a regular reviewer for NIH-CSR grant panels. His expertise has also been sought as a consultant by the American Society for Microbiology and for USDA-funded projects in Central America, Southeast Asia, South Asia, and Africa.

Committed to mentoring the next generation of professionals, Dr. Naikare designs and delivers experiential learning programs, workshops, and courses. He is especially dedicated to empowering students from underrepresented and underserved communities, fostering opportunities in veterinary sciences, public health, and allied fields.

AAVLD Biography – Jeff Hayes

Dr. Jeff Hayes received his DVM from The Ohio State University College of Veterinary Medicine in 1982. That same year he began his career with the Ohio Department of Agriculture Animal Disease Diagnostic Laboratory as a necropsy diagnostician, a career that lasted more than 36 years, retiring in June 2020 after a 12-year tenure as the Section Head of the Pathology and Histology Sections. He earned his master's degree in veterinary Pathobiology also from OSU CVM in 2000, working on dual infection of pigs with PRRSV and PRCV under the guidance of Drs. Linda Saif and Paul Stromberg.

From 2002 -2003, Dr. Hayes was a veterinary medical officer for the USDA, serving as a veterinary pathologist for the Foreign Animal Disease Diagnostic Laboratory at Plum Island. After returning to the Ohio ADDL in 2003, he continued as an invited instructor for the Foreign Animal Disease Courses over a 20 year period. Dr. Hayes figures he helped train over a thousand class participants in recognizing the clinical signs, gross lesions and sampling procedures for 11 various diseases foreign to livestock and poultry in the United States, including foot and mouth disease, classical and African swine fevers, virulent Newcastle disease - including in the earlier years rinderpest (now globally eradicated) and highly pathogenic avian influenza.

Another highlight of his career involved membership in the AAVLD from 1989-2020. It was always a joy to see fellow diagnostician colleagues from other laboratories, universities and even state and federal government agencies. He was a member of the Pathology Committee for several years and assisted in co-chairing the Histopathology Slide Seminar for two years. It was a privilege and pleasure to offer scientific presentations over many years at meetings around the country. Dr. Hayes is currently enjoying retirement and spending more time with his four grown children and five grandchildren – and 3 step-grandchildren and 7 step-great-grandchildren – and taking on occasional teaching stints at the Ohio State CVM.

This research was undertaken as part of Emily's combined PhD and pathology residency at Charles Sturt University, Australia. Emily is now working as a veterinary clinical pathologist.

Andrew D. Miller is a graduate of Cornell University (BS ’01, DVM ’05) and a board certified anatomic veterinary pathologist (Dipl. ACVP ’08). He is currently an Associate Professor in the Department of Population Medicine and Diagnostic Sciences and laboratory director of the Section of Anatomic Pathology at Cornell University College of Veterinary Medicine and the New York State Veterinary Diagnostic Laboratory. Dr. Miller’s expertise is in oncologic pathology and neuropathology, especially comparative neoplasia. Dr. Miller has authored and co-authored over 180 peer reviewed articles, 5 book chapters, and is an editorial board member of *Veterinary Pathology* and *The Journal of the American Veterinary Medicine Association*.

My name is Brooklyn Cauwels, and I am a Diagnostic Associate II in the Serology section of the Iowa State University Veterinary Diagnostic Laboratory. I received a BS in Biology, minor in Chemistry from ISU and have completed my first year of graduate school at ISU, pursuing a MS in Immunobiology. Since starting in my position, I have learned many serological assays across multiple testing platforms such as ELISAs, Luminex FMIAs, IFAs and agglutination assays. I was a major technician in the Covid-19 Public Health Testing Services lab during the peak of the pandemic, collaborated with fellow technicians to develop and implement a sample processing method to mitigate the risk of contamination of samples for Health Assurance Testing Service clients, and have worked on projects related to the validation of assays for use at the ISU VDL. For my research, I have been trained in PBMC isolation, cell isolation, and ELISpot assays and am continuing to learn other techniques including cell proliferation assays, flow cytometry as well as extraction and PCR, which I will become proficient in during my education for my future career. This has enabled me to expand my knowledge and capabilities, aligning with my goals to work in research related to diagnostic techniques, infectious diseases, and host-pathogen interaction at a more advanced level.

My name is MaRyka Smith, I am from the Center for Outcomes Research and Epidemiology within the College of Veterinary Medicine at Kansas State University. I am a PhD Candidate under Dr. Mike Sanderson. I completed my Doctor of Veterinary Medicine in May 2024 and hope to finish my PhD next fall. The core of my dissertation is epidemiology of Foot and Mouth Disease. My projects have specifically focused on reviewing biosecurity methods and assessing traceability of livestock in the event of an outbreak with computer modeling. I am exceedingly grateful for being selected for this award. I really enjoyed this conference and meeting so many future colleagues. I can't wait to attend again in the future.

Kendall Mara received her BS in Microbiology from the University of Missouri – Columbia and is now a second-year PhD student in the Department of Microbiology, Genetics, and Immunology at Michigan State University. She conducts research under the guidance of Dr. Kimberly Dodd and Dr. Rinosh Mani at the MSU Veterinary Diagnostic Laboratory studying antimicrobial resistance in veterinary *Mycoplasmas.*

Calvin Ko is a mycoplasmologist and a veterinary pathologist dedicated to swine disease research and diagnostics. His specialties include bacterial culture and modern diagnostic tools application for fastidious Mollicutes, and is now a Graduate Assistant Researcher and Anatomic Pathology Resident at Iowa State University. Currently, he is working with Dr. Rachel Derscheid and Dr. Pablo Pineyro with a focus on diagnostic method development, evaluation, and optimization in swine Mycoplasma, with training in diagnostic pathology.

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME	POSITION TITLE
Hesse, Richard A.	Professor Director of Diagnostic Virology
eRA COMMONS USER NAME	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Huron College, Huron, South Dakota	BA	1975	Biology
South Dakota State University	MS	1982	Biology
University of Nebraska--Lincoln	PhD	1993	Virology

A. Positions and Honors: Positions and employment

March 1976 to March 1979 - Biological Research Assistant, Virology Division, United States Army Medical Research Institute of Infectious Diseases (USAMRIID), Fort Detrick, Maryland.
April 1979 to November 1981 - Research Assistant, Virology Section, Animal Disease Research and Diagnostic Laboratory, South Dakota State University, Brookings, South Dakota.
November 1981 to July 1983 - Assistant Research Scientist; Virology Section, Research and Development, Solvay Animal Health (Salsbury Laboratories), Charles City, Iowa.
July 1983 to March 1985 - Associate Research Scientist; Virology Section, Research and Development, Solvay Animal Health (Salsbury Laboratories), Charles City, Iowa.
March 1985 to October 1990 - Senior Research Scientist/Group Leader; Virology Section, Research and Development, Schering Plough Animal Health, Omaha, Nebraska.
October 1990 to May 1993 - Associate Principal Scientist/Group Leader, Schering Plough Animal Health, Omaha, Nebraska.
May 1993 to June 1997 - Principal Scientist/Group Leader.
February.1994 to Present - Adjunct Assistant Professor, Department of Veterinary and Biomedical Science, University of Nebraska-Lincoln.
June 1995 to Present Graduate College Faculty Member and Fellow of the Univeresity of Nebraska.
June 1997 to July 2006 - Manager Virology Biologics, Research and Development, Intervet, Inc. DeSoto, KS.
May 2002 to Present - Appointed as Assistant Professor/Collaborator in the Department of Veterinary Microbiology and Preventive Medicine at Iowa State University.
February 2005 to Present - Appointed as Adjunct Assistant Professor in the Department of Molecular Biosciences at the University of Kansas.
July 2006 to Present – Associate Professor, Promoted to Professor 2011, Director of Diagnostic Virology, September 2019 to Present – Professor Emeritus, Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University, Manhattan, Kansas.

USDA Veterinary Biological Licenses Awarded-Project Leader

Porcine Circovirus Vaccine, Type 2, Killed Baculovirus Vector, Code 19K5.RO Conditional License. (2005).
Porcine Reproductive and Respiratory Syndrome (PRRS) Vaccine: Reproductive and Respiratory Forms of Disease. Modified Live Virus, Code 19T1.20 (1997).
Porcine Reproductive and Respiratory Syndrome (PRRS) Vaccine: Reproductive Disease. Modified Live Virus, Code 19T1.20 (1996).
Porcine Rotavirus (Bivalent)-Transmissible Gastroenteritis Vaccine-Clostridium Perfringens Type C-Escherichia Coli Bacterin-Toxoid, Modified Live and Killed Virus, Code 49B0.20. (1992).
Encephalomyelitis-Influenza Vaccine, Eastern and Western, Killed Virus, Ehrlichia Risticii-Tetanus Bacterin-Toxoid, Code 4A35.4. (1992).

Encephalomyelitis-Influenza Vaccine, Eastern and Western, Killed Virus, Tetanus Toxoid, Code 4835.00. (1992).
Encephalomyelitis Vaccine, Eastern and Western, Killed Virus, Tetanus Toxoid, Code 4865.00. (1992).
Porcine Rotavirus-Transmissible Gastroenteritis Vaccine-Clostridium Perfringens Type C-Escherichia Coli Bacterin-Toxoid, Modified Live and Killed Virus, Code 49B0.20. (1990).
Porcine Rotavirus Vaccine-Clostridium Perfringens Type C-Escherichia Coli Bacterin-Toxoid, Killed Virus, Code 49C5.20. (1990).
Porcine Rotavirus-Transmissible Gastroenteritis Vaccine, Modified live and Killed Virus, Code 19H7.20. (1990).
Porcine Rotavirus Vaccine, Killed Virus, Code 19E5.20. (1990).
Transmissible Gastroenteritis Vaccine Modified Live Virus, Code 1961.00. (1990).

Honors

Army Distinguished Service Medal (for Lassa Fever Research) - 1979
Gamma Sigma Delta (Agriculture Honor Society) – 1981
Schering Plough Excellence Award (For PRRS Vaccine) – 1996

Professional Organizations

American Association of Veterinary Laboratory Diagnosticians
American Society for Microbiology
American Association of Swine Veterinarians
Conference for Researchers in Animal Diseases

PATENTS

U.S. Patent 10,143,739 – Vaccines for Porcine Epidemic Diarrhea Virus Infections (Issued December 4, 2018).
U.S. Patent 8,178,103 -- Porcine Reproductive and Respiratory Syndrome Virus Strains and Compositions (Issued May 15, 2012).
U.S. Patent 5,866,401– Porcine Reproductive and Respiratory Syndrome Vaccine (Issued February 24, 1997).

BOOK CHAPTERS

Co-authored with Dr. Bob Rowland and Ben Trible, Chapter 49: Parvoviridae and Circoviridae. Third Edition of Veterinary Microbiology.
Co-authored with Dr. David Benfield, Chapter 2: Porcine Adenoviruses. For the new--Tenth Edition of Diseases of Swine.
Co-authored with Drs. Jane Christopher-Hennings, Eric Nelson, Simone Oliveria and Gene Erickson, Chapter 7: Diagnostics tests, test performance and considerations for interpretation. Tenth Edition of Diseases of Swine.
Co-authored with Dr. David Benfield, Chapter 2: Porcine Adenoviruses. Eleventh Edition of Diseases of Swine.
Co-authored with Drs. Jane Christopher-Hennings, Eric Nelson, Simone Oliveria and Gene Erickson, Chapter 7: Diagnostics tests, test performance and considerations for interpretation. Eleventh Edition of Diseases of Swine.

Selected Publications:

1. Identification of BVDV2b and 2c subgenotypes in the United States: Genetic and antigenic characterization. John D. Neill, Aspen M. Workman, Richard Hesse, Jianfa Bai, Elizabeth Poulsen

Porter, Barbara Meadors, Joe Anderson, Darrell O. Bayles, Shollie M. Falkenberg. Virology. 12: (528):19-29 (2018).

2. Resistance to coronavirus infection in amino peptidase N-deficient pigs. KM Whitworth, RRR Rowland, V Petrovan, M Sheahan, AG Cino-Ozuna, Y Fang Y, R Hesse, A Mileham, MS Samuel, KD Wells, RS Prather. Transgenic Ressearch. https://doi.org/10.1007/s11248-018-0100-3 (2018).

3. Trypsin-independent porcine epidemic diarrhea virus US strain with altered virus entry mechanism. Yunjeong Kim, Changin Oh, Vinay Shivanna, Richard A. Hesse and Kyeong-Ok Chang. BMC Vet Res. 2017; 13: 356. Published online 2017 Nov 25. doi: 10.1186/s12917-017-1283-1

4. Fecal Microbiota Transplantation Is Associated With Reduced Morbidity and Mortality in Porcine Circovirus Associated Disease. Megan C. Niederwerder, Laura A. Constance1, Raymond R. R. Rowland, Waseem Abbas, Samodha C. Fernando, Megan L. Potter, Maureen A. Sheahan, Thomas E. Burkey, Richard A. Hesse and Ada G. Cino-Ozuna. Front. Microbiol., 23 July 2018 | https://doi.org/10.3389/fmicb.2018.01631.

5. Whole Genome Classification and Phylogenetic Analyses of Rotavirus B strains from the United States. FK Shepherd, DM Herrera-Ibata, E Porter, N Homwong, R Hesse, J Bai, D Marthaler. Pathogens. 2018 Apr 18;7(2). pii: E44. doi: 10.3390/pathogens7020044.Evaluation of the minimum infectious dose of porcine epidemic diarrhea virus in virus-inoculated feed. Loni L. Schumacher, Jason C. Woodworth, Cassandra K. Jones, Qi Chen, Jianqiang Zhang, Phillip C. Gauger, Charles R. Stark, Rodger G. Main, Richard A. Hesse, Mike D. Tokach, Steve S. Dritz. American Journal of Veterinary Research, 77 (10):1108-1113 (2016.

6. Experimental infection of conventional nursing pigs and their dams with porcine deltacoronavirus. Sarah Vitosh-Sillman, John Dustin Lo, Bruce Brodersen, Clayton Kellin, Alan Doster, Christina Topliff, Eric Nelson, Jianfa Bai, Erin Schirtzinger, Elizabeth Poulsen, Barbara Meadors, Joseph Anderson, Benjamin Hause, Gary Anderson, Richard Hesse. Journal of Veterinary Diagnostic Investigations, 28(5):486-97 (2016).

7. Tissue localization, shedding, virus carriage, antibody response, and aerosol transmission of Porcine epidemic diarrhea virus (PEDV) following inoculation of 4 week-old feeder pigs. Megan C. Niederwerder, Jerome C. Nietfeld, Jianfa Bai, Lalitha Peddireddi, Barbara Breazeale, Joe Anderson, Maureen A. Kerrigan, Baoyan An, Richard D. Oberst, Kimberly Crawford, Kelly M. Lager, Darin M. Madson, Raymond R. Rowland, Gary A. Anderson, Richard A. Hesse. Journal of Veterinary Diagnostic Investigations 28(6):671-678 (2016).

8. Highly diverse posaviruses in swine feces are aquatic in origin. Hause BM, Palinski RM, Hesse RA, Anderson GA. 2016. Journal of General Virology, 97:1362-1367 (2016).

9. Senecavirus A in United States pigs, Hause BM, Myers O, Duff J, Hesse RA. Emerging Infectious Diseases, 22:1323-1325 (2016).

10. Genomic and evolutionary inferences between American and global strains of porcine epidemic diarrhea virus. Jarvis MC, Lam HC, Zhang Y, Wang L, Hesse RA, Hause BM, Vlasova A, Wang Q, Zhang J, Nelson MI, Murtaugh MP, Marthaler D. Preventive Veterinary Medicine 123:175-184 (2015).

11. First identification of porcine parvovirus 6 in North America by viral metagenomic sequencing of serum from pigs infected with porcine reproductive and respiratory syndrome. Schirtzinger EE, Suddith AW, Hause BM, Hesse RA. Virology Journal 12:170 (2015).

12. Discovery of a novel putative atypical porcine pestivirus in pigs in the United States. Hause B, Collin EA, Peddireddi L, Yuan F, Chen Z, Hesse RA, Gauger PC,Clement T, Fang Y, Anderson G. Gen Virol. 2015 Jul 24. 10.1099/jgv.0.000251. [Epub ahead of print] PubMed PMID: 26219947.

13. Identification of a novel Picornavirales virus distantly related to posavirus in swine feces. Hause BM, Hesse RA, Anderson GA.Virus Genes. 2015Aug;51(1):144-7. doi: 10.1007/s11262-015-1215-8. Epub 2015 Jun 2. PubMed PMID:26032164.

14. Evaluation of porcine epidemic diarrhea virus transmission and the immune response in growing pigs. Crawford K, Lager K, Miller L, Opriessnig T, Gerber P, Hesse R. Vet Res. 2015 May 6;46:49. doi: 10.1186/s13567-015-0180-5. PubMed PMID:25943434; PubMed Central PMCID: PMC4419466.

15. Discovery of a novel nidovirus in cattle with respiratory disease. Tokarz R, Sameroff S, Hesse RA, Hause BM, Desai A, Jain K, Ian Lipkin W.J Gen Virol.2015 Aug;96(8):2188-93. doi: 10.1099/vir.0.000166. Epub 2015 Apr 27. PubMed PMID:25918239.

16. Bovine rhinitis viruses are common in U.S. cattle with bovine respiratory disease. Hause BM, Collin EA, Anderson J, Hesse RA, Anderson G. PLoS One. 2015 Mar 19;10(3):e0121998. doi: 10.1371/journal.pone.0121998. eCollection 2015.PubMed PMID: 25789939; PubMed Central PMCID: PMC4366061.

17. Pathogenicity and transmissibility of novel reassortant H3N2 influenza viruses with 2009 pandemic H1N1 genes in pigs Ma J, Shen H, Liu Q, Bawa B, Qi W, Duff M, Lang Y, Lee J, Yu H, Bai J, Tong G, Hesse RA, Richt JA, Ma W. J Virol. 2015 Mar;89(5):2831-41. doi: 10.1128/JVI.03355-14. Epub 2014 Dec 24. PubMed PMID: 25540372; PubMed Central PMCID: PMC4325708.st

18. First identification and characterization of porcine enterovirus G in the United States. Anbalagan S, Hesse RA, Hause BM.PLoS One. 9(5):e97517 (2014).

19. Discovery of a novel putative atypical porcine pestivirus in pigs in the United States. Hause B, Collin EA, Peddireddi L, Yuan F, Chen Z, Hesse RA, Gauger PC,Clement T, Fang Y, Anderson G. J Gen Virol. 2015 Jul 24. 10.1099/jgv.0.000251. [Epub ahead of print] PubMed PMID: 26219947.

20. Identification of a novel Picornavirales virus distantly related to posavirus in swine feces. Hause BM, Hesse RA, Anderson GA.Virus Genes. 2015Aug;51(1):144-7. doi: 10.1007/s11262-015-1215-8. Epub 2015 Jun 2. PubMed PMID:26032164.

21. Evaluation of porcine epidemic diarrhea virus transmission and the immune response in growing pigs. Crawford K, Lager K, Miller L, Opriessnig T, Gerber P, Hesse R. Vet Res. 2015 May 6;46:49. doi: 10.1186/s13567-015-0180-5. PubMed PMID:25943434; PubMed Central PMCID: PMC4419466.

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25. Identification and characterization of porcine enterovirus G in the United States. Anbalagan S, Hesse RA, Hause BM.PLoS One. 9(5):e97517 (2014)

Dr. Sara Lawhon is a professor at the Texas A&M University College of Veterinary Medicine & Biomedical Sciences. After receiving her DVM from Texas A&M University she completed her residency in Infectious Diseases and PhD at North Carolina State University, then became a diplomate of the American College of Veterinary Microbiologists. Dr. Lawhon serves as the director of the Clinical Microbiology Laboratory at the Texas A&M University Veterinary Medical Teaching Hospital and she is an award-winning teacher of veterinary and graduate students. Her clinical and research interests are focused on antimicrobial resistance in zoonotic pathogens. She also serves as a voting member of the VAST Subcommittee of CLSI. Dr. Lawhon is grateful for the generosity of AAVLD colleagues in sharing their expertise and knowledge.

Maria Chaves is a PhD student in the Veterinary Microbiology and Preventive Medicine Department at Iowa State University. Maria got her DVM at the Universidade Federal de Minas Gerais (Brazil) in 2022 and moved to the US to pursue her passion for research and improving diagnostic techniques. Her work is focused on applying sequencing technologies towards identification and characterization of infectious agents.

Dr. Hayley Masterson is a veterinary resident in clinical microbiology at the Washington Animal Disease Diagnostic Laboratory and a PhD candidate in Immunology and Infectious Disease at Washington State University in Pullman, Washington. She is passionate about parasitology and tick-transmitted diseases, with a special interest in bovine babesiosis. She hopes to continue working in diagnostic medicine and research when she completes her program. One of her main goals is to become boarded in veterinary parasitology so that she can continue to aid diagnostic laboratories in the development of molecular diagnostic options for identifying and diagnosing parasitic diseases.

Maria Hakimi earned her B.S. in Microbiology from Iowa State University (ISU) in 2017. After gaining practical experience in a food microbiology laboratory, she worked in the Bacteriology section of the ISU Veterinary Diagnostic Laboratory. She completed her Master of Science in Veterinary Microbiology at ISU in 2023. Maria is now a second-year PhD student in Veterinary Microbiology and Preventive Medicine at ISU, under the mentorship of Dr. Ganwu Li and Dr. Eric Burrough. Her PhD research focuses on understanding the genomic diversity, pathogenicity, and antimicrobial resistance of *Brachyspira hyodysenteriae*, the primary cause of swine dysentery. Through this work, the team aims to develop targeted disease control strategies and deepen understanding of this important swine pathogen.

Dr. Blaire MacNeill was raised in sunny Las Vegas, Nevada. She earned her Doctor of Veterinary Medicine from Colorado State University in 2023. Throughout veterinary school, she worked as a laboratory technician in the bacteriology section of the CSU Veterinary Diagnostic Laboratory. She is currently pursuing a Clinical Microbiology Residency and Ph.D. at Colorado State University under the mentorship of Dr. Joshua Daniels. Her research interests include antimicrobial resistance and bacteriophage therapy development for multidrug resistant infections in veterinary patients. Outside of her academic pursuits she enjoys hiking in the mountains of Colorado, reading novels, and spending time with her two cats Nugget and Squish.

Calvin Ko is a mycoplasmologist and a veterinary pathologist dedicated to swine disease research and diagnostics. His specialties include bacterial culture and modern diagnostic tools application for fastidious Mollicutes, and is now a Graduate Assistant Researcher and Anatomic Pathology Resident at Iowa State University. Currently, he is working with Dr. Rachel Derscheid and Dr. Pablo Pineyro with a focus on diagnostic method development, evaluation, and optimization in swine Mycoplasma, with training in diagnostic pathology.

Paarthiphan Elankumaran, PhD

Postdoctoral Research Associate,

Veterinary Diagnostic and Production Animal Medicine (VDPAM), Iowa State University.

Dr. Paarthiphan Elankumaran is currently pursuing his postdoctoral research in microbial genomics at Iowa State University, Ames, Iowa under the supervision of Professor Ganwu Li. He has obtained his bachelor's degree with a first-class honors in Molecular Biotechnology from University of Otago, Dunedin, New Zealand in 2017 and Doctor of Philosophy (PhD) in Microbial Genomics from University of Technology Sydney, Sydney, Australia in 2023. His research interests and expertise are in the domains of pathogen genomics, pathogen evolution, microbial genomic epidemiology, antibiotic resistance and using bioinformatics and data analysis as tools to study microbial genomics. He is hoping to use his research to benefit the advancement of veterinary diagnostic and healthcare sectors in the future.

I am currently in my third year of veterinary pathology residency at Iowa State University. My favorite part of this program is combining what I have learned as a resident with my private practice experience to provide valuable information to our diagnostic laboratory clients and instruct veterinary students in class, lab, and on the necropsy floor. My primary research is focused on the immunopathologic characterization of viral respiratory disease in large animal species using tissue image analysis software. This has given me other opportunities for applied research in veterinary pathology, and my residency training has opened the door for viral discoveries and collaborations.

Dr. Emily Blackwell is a third-year trainee in the combined veterinary anatomic pathology residency and PhD program at Johns Hopkins University. Her current research is focused on early cancer detection with Dr. Jonathan Dudley and the Molecular Diagnostics Research and Development group. She is also interested in Elasmobranch pathology and enjoys exploring new diagnostic methods for exotic animals.

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Trevor is a second-year anatomic pathology resident and PhD student at the Iowa State University's Veterinary Diagnostic Laboratory. He received his DVM from Iowa State in 2023 and has an interest in food animal pathology and research. His PhD thesis focuses on the respiratory clinical manifestation in porcine hemagglutinating encephalomyelitis virus (PHEV). After his training he will enjoy a career in veterinary pathology and wherever that journey takes him.

I am currently in my third year of veterinary pathology residency at Iowa State University. My favorite part of this program is combining what I have learned as a resident with my private practice experience to provide valuable information to our diagnostic laboratory clients and instruct veterinary students in class, lab, and on the necropsy floor. My primary research is focused on the immunopathologic characterization of viral respiratory disease in large animal species using tissue image analysis software. This has given me other opportunities for applied research in veterinary pathology, and my residency training has opened the door for viral discoveries and collaborations.

Dr. Nora Gardner is a second-year anatomic pathology resident at North Carolina State University College of Veterinary Medicine. She attended Ross University College of Veterinary Medicine and completed her clinical year at NCSU CVM in 2023. Her primary interest is ocular pathology, but she also enjoys ruminants and equids. She is currently interested in pursuing a career in a diagnostic lab, but she also loves teaching and may consider a career in academia. Outside of pathology she loves reading, watching movies and TV (RABID Star Trek fan), and playing an eclectic group of instruments.

My name is MaRyka Smith, I am from the Center for Outcomes Research and Epidemiology within the College of Veterinary Medicine at Kansas State University. I am a PhD Candidate under Dr. Mike Sanderson. I completed my Doctor of Veterinary Medicine in May 2024 and hope to finish my PhD next fall. The core of my dissertation is epidemiology of Foot and Mouth Disease. My projects have specifically focused on reviewing biosecurity methods and assessing traceability of livestock in the event of an outbreak with computer modeling. I am exceedingly grateful for being selected for this award. I really enjoyed this conference and meeting so many future colleagues. I can't wait to attend again in the future.

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Aurelle Yondo is a third-year Ph.D. student in Comparative Biomedical Sciences at the University of Georgia, with a keen interest in infectious diseases, molecular diagnostics, and global health. Building on a strong foundation in biomedical sciences, gained through her B.Sc. from the University of Douala in Cameroon and her MSc from the University of Georgia, Aurelle has honed her expertise in a wide range of laboratory testing techniques. Under the mentorship of Dr. Binu Velayudhan at the Athens Veterinary Diagnostic Laboratory, she is leading efforts to develop a point-of-care test for avian influenza virus (AIV) and avian paramyxovirus type-1 (APMV-1). Aurelle is committed to advancing infectious disease research by creating diagnostic tools that detect both existing and emerging viruses, playing a crucial role in safeguarding both animal and human health.

Sai Narayanan is an Anatomic pathology resident at the College of Veterinary Medicine at Oklahoma State University. Besides residency training, his research focus includes exploring nucleic acid sequencing applications in veterinary diagnostics such as whole genome sequencing, microbiome, metagenome-based pathogen detection using perl, python and machine learning neural networks.

Dr. Berenice Munguía-Ramírez obtained her DVM degree in México in 2019. She completed her MSc in Veterinary Preventive Medicine at Iowa State University (ISU) in 2022, and currently, she is a PhD student in Population Sciences in Animal Health at ISU under the mentorship of Dr. Zimmerman and Dr. Giménez-Lirola.

Her research focuses on advancing molecular diagnostics for swine diseases and integrating diagnostics with swine epidemiology to improve disease detection and management strategies in the swine industry. Her work aims to enhance the accuracy of diagnostic methods, contributing to more effective disease control and prevention.

Sydney Epley
Research.Assistant.
University of Kentucky Veterinary Diagnostic Lab – Toxicology

Graduate.Student
Lincoln Memorial University

Sydney Epley is a current graduate student in the Master of Science – Veterinary Biomedical Science program at Lincoln Memorial University and is a prospective veterinary student for the class of 2029 with special interest in equine and small ruminant medicine. As a student at LMU, she prides herself on her activism through her memberships to Veterinarians As One Inclusive Community for Empowerment (VOICE), the Women's Veterinary Leadership Development Initiative (WVLDI), Shelter Medicine Club, Surgery Club, and the American Heartworm Society.

Currently, she is working as a research assistant at the University of Kentucky's Veterinary Diagnostic Lab in the Toxicology department where she began in May of 2024 under the supervision of Dr. Megan Romano, DVM, DABVT. Her work since May has predominantly been to identify trace mineral reference intervals for dogs, cats, and horses in the state of Kentucky.

Prior to beginning her work at UKVDL, Sydney was a student at the University of Kentucky and graduated in 2020 with a major in Animal Science and a minor in Agricultural Economics. During her time as a undergraduate, she was invested in various clubs including Block & Bridle where she received the Sheep Herdsman Award and the Patch G Woolfolk Scholarship. She was also a member of the Intercollegiate Saddle Seat Riding Association, Bluegrass Arabian Horse Association and Society for the Arabian Horse in the Bluegrass Area where she received various accolades for her time and dedication to horseback riding.

She is on the Board of Directors for the Bluegrass Arabian Horse Association and, in her spare time, acts as a Breed Ambassador for the Arabian Horse Association, American Saddle Horse & Breeder's Asssociation, and the American Hackney Horse Society.

Calvin Ko is a mycoplasmologist and a veterinary pathologist dedicated to swine disease research and diagnostics. His specialties include bacterial culture and modern diagnostic tools application for fastidious Mollicutes, and is now a Graduate Assistant Researcher and Anatomic Pathology Resident at Iowa State University. Currently, he is working with Dr. Rachel Derscheid and Dr. Pablo Pineyro with a focus on diagnostic method development, evaluation, and optimization in swine Mycoplasma, with training in diagnostic pathology.

Catie Burgess graduated from the College of William and Mary in May of 2020 with a degree in Biology and Government, and an Honors distinction for research on *Helicobacter pylori* under Mark Forsyth. Following graduation, she joined the newly formed Molecular Diagnostic Laboratory at the Fralin Biomedical Research Institute at Virginia Tech to meet the COVID-19 testing needs of Southwest Virginia. In August of 2021 she entered the Translational Biology, Medicine, and Health PhD program at Virginia Tech. She is currently in her 4th year and working on surveillance enhancement strategies for *Theileria orientalis* Ikeda and *Anaplasma marginale* under the mentorship of Kevin Lahmers.

AAVLD Student/Trainee Award

Short Bio

Agustín Rebollada-Merino

amr449@cornell.edu; (+1) (607) 379-0373

Department of Population Medicine and Diagnostic Sciences, Section of Anatomic Pathology, College of Veterinary Medicine, Cornell University, Ithaca, NY

I am Agustín Rebollada-Merino originally from Spain. I am a Doctor in Veterinary Medicine (DVM) and hold a PhD in Veterinary Sciences from the Complutense University of Madrid, Spain. My doctoral research focused on exploring novel aspects of pathology and immune response of brucellosis in both livestock and wildlife. During my PhD, I participated in research projects which provided me with invaluable exposure to Transboundary Diseases and a first contact with Anatomic Pathology. My passion for diagnostic pathology was further ignited through externships at the CAHFS Laboratory (UC Davis) at San Bernardino, CA. I am currently an Anatomic Pathology Resident at Cornell University trying to refine my skills in diagnostic pathology while collaborating with a dynamic team of professionals. My professional interests are diagnostic pathology, bacterial pathogenesis (particularly brucellosis and mycobacteriosis), fish pathology, and veterinary forensics. I am very proud to be a Davis-Thompson Foundation's volunteer.

Lincoln Memorial College of Veterinary Medicine
Class of 2027

Steffi Coates was raised in Raleigh, North Carolina, surrounded by her parents, sister, three cats, two dogs, and two horses. She graduated from Davidson College in 2019 with a double major in Biology and German Studies. Currently, Steffi is pursuing her Doctor of Veterinary Medicine degree at Lincoln Memorial University College of Veterinary Medicine, with plans to graduate in the spring of 2027. During her time at the University of Kentucky Veterinary Diagnostic Lab, she had the opportunity to work with Dr. Laura Kennedy on a retrospective study of humeral fractures in racehorses, which sparked her passion for veterinary research.

Myranda Gorman
University of Tennessee College of Veterinary Medicine
Class of 2025

Myranda Gorman is a DVM/PhD at the University of Tennessee College of Veterinary Medicine. She is a graduate research assistant in the Leptospira Research and Diagnostic Lab, where she investigates leptospirosis in bovine populations. Her academic passions are population health, microbiology, and bioinformatics. After completing her graduate education, she hopes to pursue a research and teaching position at a veterinary university.

Sarah Landeck
Virginia-Maryland College of Veterinary Medicine
Class of 2027

Sarah is a second year, 23-year-old student on the equine track at VMCVM. She graduated in 2023 from Penn State with a degree in Animal Science and a minor in Equine Science. She is originally from Long Island, NY and loves spending free time riding her horse Nova, running, and traveling. She is a huge football fan and spends her autumn weekends watching PSU and the NY Giants! Another fun fact about her is that she loves hiking and have visited 16 US National Parks. Her goal is to hit all of them eventually. Her veterinary interests are clinical pathology and equine sports medicine.

Elizabeth Ohl
The Ohio State University College of Veterinary Medicine
Class of 2026

Elizabeth first became introduced to veterinary diagnostics, research, and public health while working for the Animal Influenza Ecology and Epidemiology Research program at Ohio State. Her work primarily focused on influenza surveillance in swine, SARS-CoV-2 surveillance in white-tailed deer, and foreign animal disease depopulation response plans. Last summer, she studied the biology and zoonotic potential of influenza D viruses, deepening her understanding of viral infectivity and public health implications.

Elizabeth has interned with the Ohio Department of Agriculture, where she rotated through the various divisions. Over her academic career she has developed a growing interest and passion for anatomic pathology and veterinary diagnostics.

Elizabeth is involved in Ohio State's Infectious Diseases Institute Trainee Association, Veterinary Public Health Club, Pathology Club, and is also a member of AABP and AASV. She is excited to attend this year's annual meeting, making connections and continuing to learn more about careers in this critical field of veterinary medicine

Maggie Ringley
The Ohio State University College of Veterinary Medicine
Class of 2026

Magdalen “Maggie” Ringley grew up in Northern Georgia and Central Indiana. Maggie started riding horses at the age of 4, competing competitively and working hard to learn both in school and on the farm. In 2016, she traveled to Peru where she observed the slaughter process for a local festival in a rural community within the Andes Mountains. This ignited Maggie’s passion for her career path in veterinary science - to help this town and others worldwide, where education on livestock practices is not as well known. Maggie is a 3rd-year veterinary student at The Ohio State University. As of Fall 2023, Maggie is combining her DVM Program with an MPH-VPH degree. She is interested in focusing on large/food/mixed animal medicine, public health, food safety, antimicrobial resistance, and disease prevention and control. Maggie is an Adel A. Malak Scholar with the USDA-FSIS and also works in the Microbiology Laboratory at The Ohio State University Veterinary Medical Center under the supervision of Drs. D. Diaz-Campos and J. Van Balen Rubio. Outside of the lab and her studies, she enjoys traveling, hiking, pet-sitting, being involved in campus organizations, and learning new skills alongside her husband.