MATTHEW R. KULPA, DVM, MS

Bryan, TX 77801 | 313.575.6866 | kulpamat@gmail.com | Curriculum Vitae

EDUCATION

2025 **PhD**, Doctor of Philosophy in Biomedical Science, Texas A&M University (College Station, TX)

PI: Dr. Guilherme Verocai

Thesis: Onchocercidae cryptic biodiversity of wild North American ungulates and developing novel molecular approaches

2020 **DVM**, Doctor of Veterinary Medicine, Michigan State University (East Lansing, MI)

2014 MS, Master of Science in Biology, Bowling Green State University (Bowling Green, OH)

PI: Dr. Sheryl Coombs

Thesis: The lateral line is necessary for blind cavefish rheotaxis in non-uniform flow

2010 **BS**, Bachelor of Science in Zoology, Michigan State University (East Lansing, MI) Concentration: Ecology, evolution, and organismal biology

RESEARCH EXPERIENCE

2020-Present Graduate Research Assistant

Department of Veterinary Pathobiology, Texas A&M University (College Station, TX)

Supervisor: Dr. Guilherme Verocai

Committee: Dr. Charles Criscione, Dr. John Gilleard, Dr. Jessica Light

Thesis: Onchocercidae cryptic biodiversity of wild North American ungulates and developing novel molecular approaches

- Performed DNA extraction and cPCR methods on different filarial worm sample types (e.g., adult
 worms, cervid skin, and arthropods) to investigate host-/vector-associations, geographic distribution,
 and diversity of North American wild cervids.
- Used a muti-gene phylogenetic approach of newly discovered *Onchocerca* lineages to compare with other known species of *Onchocerca* to reveal greater context to the evolutionary history of the genus.
- Established and optimized a deep amplicon sequencing approach to differentiate known or unknown species of filarial parasites in a sample.
- Sequenced the mitogenome of unknown *Onchocerca* lineages of wild cervids in North America.
- Deployed novel deep amplicon sequencing approach to acquired skin and blood samples to investigate further the biodiversity of Onchocercidae species in North American wild mammals.
- Investigated pathogenicity and phylogeny of wildlife parasites of snakes including *Spirometra*, *Cryptosporidium*, and *Giardia*
- Diagnosed first case report of a Canadian dog infected with an uncharacterized *Brugia* species.
- Molecularly characterized *Stephanofilaria stilesi*, a common dermatitis-causing parasite in cattle.
- Established a network of wildlife scientists, biologists, veterinarians, and stakeholders to acquire host-parasite-vector samples needed to complete research.
- Performed classical parasitology techniques to diagnose domestic and non-domestic animal cases at Texas A&M Veterinary Hospital.
- Mentored veterinary and undergraduate students in lab techniques and projects.

2018 Veterinary Student Researcher

Wildlife Conservation Society Zoological Health, Bronx Zoo (New York, NY)

Supervisor: Dr. John Sykes

Thesis: Zinc toxicosis and hypovitaminosis A outbreak event in White-Fronted and White-Throated Bee Eaters at The Bronx Zoo

- Performed retrospective data analysis of zoological medical records utilizing ZIMS to explore possible causes or reasons for zinc toxicosis and hypovitaminosis A outbreak in captive Bee Eaters.
- Assisted in clinical procedures and surgeries involving Bronx Zoo animal collection.
- Assisted in teaching children (8-13) about the veterinary medicine field through the Little Zoo Vet and Zoo Vet Academy educational programs.

2017 Veterinary Student Researcher

Boehringer Ingelheim Veterinary Scholars, Michigan State University (East Lansing, MI)

Supervisor: Dr. Dalen Agnew

Thesis: Studied the characteristic and effect of biofilm production on the canid uterus and susceptibility to pyometra

- Performed various staining techniques to understand biofilm thickness of dogs with or without pyometra.
- Sectioned fresh mammalian tissue samples that were catalogued and used for the Reproductive Health Surveillance program.

2012-2014 Graduate Research Assistant

Department of Biology, Bowling Green State University (Bowling Green, OH)

Supervisor: Dr. Sheryl Coombs

Committee: Dr. Paul Moore, Dr. Moira van Staaden, Dr. Daniel Wiegmann

Thesis: The lateral line is necessary for blind cavefish rheotaxis in non-uniform flow

- Used aminoglycoside antibiotics to disable the lateral line of bind cave fish (*Astyanax mexicanus*) to investigate how fish orient to non-uniform water flow.
- Designed experimental chamber with velocity gradients and visualized them using PIV (Particle image velocimetry) programming and equipment. In addition, analysis of rheotaxis was measured with custom-written MATLAB scripts that automatically read the directionality of fish being recorded.
- Utilized fish anesthesia protocols (MS-222) for subsequent light microscopy and daspei dye staining to confirm lateral line functionality.
- Fish animal husbandry protocols were followed to care and maintain blind cave fish colony and other research fish used in the lab.
- Mentored undergraduate students in lab techniques and projects.

2011-2012 Undergraduate Research Assistant

Department of Biology, Wayne State University (Detroit, MI)

Supervisor: Dr. Markus Friedrich

Thesis: Investigation of phototaxis in the red flour beetle larvae using different wavelengths of light

- Cared for and maintained flour beetle colonies.
- Designed experimental trials for flour beetle phototaxis by recording their movement and behavior.

2010-2011 Undergraduate Research Assistant

Integrated Pest Management Lab, Michigan State University (East Lansing, MI) Supervisor: Dr. David Epstein

Project: Development and delivery of biopesticide-based pest management for Michigan apple producers

• Constructed and maintained pheromone-baited, plant volatile-baited, and passive insect traps used to monitor the diversity of insect fauna.

PUBLICATIONS

- 1. **Kulpa, M.R.**, Lefoulon, E., Beckmen, K.B., Allen, S.E., Malmberg, J., Crouse, J.A., Thompson, D.P., Benedict, B.M., Goldsmith, D.A., McCarthy, S., **2025**. A footworm in the door: revising Onchocerca phylogeny with previously unknown cryptic species in wild North American ungulates. **International Journal for Parasitology**. 55, 59-68.
- 2. Thomas, A.M., Verocai, G.G., Soghigian, J., Mavrot, F., Jutha, N., Adamczewski, J., Davison, T., Duytschaever, G., Fernandes, A., Kelly, A., **Kulpa, M.R.**, Lamontagne, E., Leclerc, L., McCarthy, S., McLaren, A., Melin, A.D., Kutz, S.J. **2025**. Widespread geographic distribution of filarioid nematodes in caribou (*Rangifer tarandus* sspp.) in Canada. **International Journal for Parasitology: Parasites and Wildlife**. 26, 101030.
- 3. Verocai, G.G., Gomez, J.L., Hakimi, H., **Kulpa, M.R.**, Luksovsky, J.L., Thompson, D.P., Crouse, J.A., **2024**. Validation of a species-specific probe-based qPCR for detection of *Setaria yehi* (Filarioidea: Onchocercidae) in Alaskan moose (*Alces alces gigas*). **International Journal for Parasitology: Parasites and Wildlife.** 25, 100990.
- 4. **Kulpa**, **M**., Goldsmith, D., Verocai, G.G. **2023**. An unusual case of *Brugia* sp. infection in a dog from Alberta, Canada. **Veterinary Parasitology: Regional Studies and Reports** 37, 100811.
- 5. Lui, C.C., **Kulpa**, **M**., Verocai, G.G., Armién, A.G., Edwards, E.E., Wiener, D.J., Rech, R.R. **2023**. Reassessing *Stephanofilaria stilesi* dermatitis in cattle, with characterization of molecular markers for confirming diagnosis. **Parasites & Vectors** 16, 278.
- 6. Verocai, G.G., Harvey, T.V., Sobotyk, C., Siu, R.E., **Kulpa**, **M**., Connolly, M. **2023**. *Spirometra* infection in a captive Samar cobra (*Naja samarensis*) in the United States: An imported case? **International Journal for Parasitology: Parasites and Wildlife** 20, 133-137.
- 7. Benedict, B.M., Barboza, P.S., Crouse, J.A., Groch, K.R., **Kulpa**, **M.R.**, Thompson, D.P., Verocai, G.G., Wiener, D.J. **2023**. Sores of boreal moose reveal a previously unknown genetic lineage of parasitic nematode within the genus *Onchocerca*. **PLoS One** 18, e0278886.
- 8. Danks, H.A., Sobotyk, C., Saleh, M.N., **Kulpa**, **M.R.**, Luksovsky, J.L., Jones, L.C., Verocai, G.G. **2022**. Opening a can of lungworms: Molecular characterization of *Dictyocaulus* (Nematoda:

- Dictyocaulidae) infecting North American bison (*Bison bison*). **International Journal for Parasitology: Parasites and Wildlife** 18, 128-134.
- 9. Kulpa, M., Nelson, K.J., Morales, A.M., Ryan, B.M., Koschik, M.L., Scott, J.J., Verocai, G.G. 2021. Presence of a cryptic *Onchocerca* species in black flies of northern California, USA. Parasites & Vectors 14, 1-10.
- 10. **Kulpa**, **M**., Bak-Coleman, J., Coombs, S. **2015**. The lateral line is necessary for blind cavefish rheotaxis in non-uniform flow. **The Journal of Experimental Biology** 218, 1603-1612.
- 11. **Kulpa**, **M.R**. **2014**. The Lateral Line is Necessary for Blind Cavefish Rheotaxis in Non-Uniform Flow. Bowling Green State University.

MANUSCRIPTS UNDER REVIEW *Manuscripts available upon request

1. *Kulpa, M. R., Blazier, C., Gileard, J. S., & Verocai, G. G. 2025. Using deep amplicon sequencing as a molecular xenomonitoring approach for detecting filarial nematodes in biting arthropod vectors. bioRxiv, 2025-07.

MANUSCIPTS IN PREP *Manuscripts available upon request

- 1. *Kulpa, M.R., Hoberg, E.P., Kutz, S.J., Verocai, G.G. A review of Onchocercidae nematodes (Nematoda; Filarioidea) infecting wild ruminant ungulates of North America. International Journal for Parasitology.
- 2. *Kulpa, M.R., Crouse, J.A., Thompson, D.P., Luksovsky, J.L., Blazier, J.C., Gilleard, J.S., Verocai, G.G. In cold blood: Screening wild Alaskan moose (*Alces alces gigas*) for filarial nematode (Filarioidea: Onchocercidae) infections using deep amplicon sequencing approaches. **Parasitology**.

ORAL PRESENTATIONS †Presenter, ‡Author Only

- 1. †Kulpa, M.R., Blazier, J.C., Gilleard, J.S., Verocai, G.G. Using deep amplicon sequencing as a molecular xenomonitoring approach for detecting filarial nematodes in biting arthropod vectors. 70th Annual American Association of Veterinary Parasitologists Meeting, St. Louis, MO, **2025**.
- 2. †**Kulpa**, **M.R.**, Benedict, B.M., Crouse, J.A., Thompson, D.P., Ramos, A.N., Sanders, T.L., Barboza, P.S., Verocai, G.G., Waiting in the wings: How recent arthropod sampling alters our understanding of vector-parasite assemblages of the northern Nearctic. 69th Annual American Association of Veterinary Parasitologists Meeting, Atlanta, GA, **2024**.
- 3. Garcia, C., O'Hara, K., Kelly, M., Joe, L., *Kulpa, M., Verocai, G., Saleh, M. Assessing zoonosis in Texas snakes: *Cryptosporidium* and *Giardia* prevalence in captive and wild-caught snakes. 69th Annual American Association of Veterinary Parasitologists Meeting, Atlanta, GA, **2024**.
- 4. Mendoza, A.K., Garcia, C.P., Ajhand, L., Kelly, M.A., [‡]Kulpa, M.R., Verocai., G.G., Saleh, M.N. Molecular phylogenetic relationships of *Ornithodoros turicata* collected throughout Texas. 69th Annual American Association of Veterinary Parasitologists Meeting, Atlanta, GA, **2024**.
- 5. †Kulpa, M., Verocai, G. Allopatric and sympatric sampling of *Onchocerca* of North American ungulates reveals a richer cryptic diversity and complex host associations. 68th Annual American Association of Veterinary Parasitologists Meeting, Lexington, KY, **2023**.

- 6. *Kulpa, M. The complex historical biogeography of *Onchocerca* lineages infecting wild ungulates in North America. Oral 'Flash Talk' presented at the 6th Postdoctoral Research Symposium, College Station, TX, 2022.
- 7. Gomez, J., *Kulpa, M., Tyagi, N., Luksovsky, J., Thompson, D., Crouse, J., Verocai, G. Validation of a species-specific probe-based qPCR for detection of Setaria yehi in Alaskan moose (Alces alces). Texas A&M Summer Veterinary Student Research Conference, College Station, TX, 2022.
- 8. †Kulpa, M., Verocai G. Multi-locus phylogenetic relationships among *Onchocerca* isolates from the New York and California ungulates. 97th Annual American Parasitology Conference, College Station, TX, 2022.
- 9. *Kulpa, M., Benedict, B., Wiener, D., Crouse, J., Thompson, D., Barboza, P., Verocai, G. A cryptic Onchocerca species in moose from southern Alaska. 67th Annual American Association of Veterinary Parasitologists Meeting, Snowbird, UT, 2022.
- 10. Kelly, M., Sobotyk, C., Tyagi, N., *Kulpa, M., McLean, N., Verocai, G. Preliminary validation of a probe-based qPCR for detection of zoonotic Onchocerca lupi in clinical samples of companion animals. 67th Annual American Association of Veterinary Parasitologists Meeting, Snowbird, UT, 2022.
- 11. Danks, H., Sobotyk, C., Saleh, M., *Kulpa, M., Luksovsky, J., Jones, L., Verocai, G. Opening a can of (lung)worms: molecular characterization of Dictyocaulus (Nematoda; Dictyocaulidae) infecting North American bison. 67th Annual American Association of Veterinary Parasitologists Meeting, Snowbird, UT, 2022.
- 12. Danks, H., Sobotyk, C., Saleh, M., *Kulpa, M., Luksovsky, J., Jones, L., Verocai, G. Opening a can of (lung)worms: molecular characterization of Dictyocaulus (Nematoda; Dictyocaulidae) infecting North American bison. Texas A&M Summer Veterinary Student Research Conference, College Station, TX, 2021.
- 13. *Kulpa, M. Scientific Journey Through Professional and Graduate School, Wildlife Disease Association Club at Cornell University, Ithaca, NY, 2021 (Invited Speaker).
- 14. †Kulpa, M., Verocai, G. Disentangling the cryptic biodiversity of *Onchocerca* in wild Northern American ungulates. 66th Annual American Association of Veterinary Parasitologists Meeting, Lexington, KY, 2021.
- 15. *Kulpa, M., Agnew, D. Biofilm in the canine uterus. Phi Zeta Research Day, Michigan State University, East Lansing, MI, 2017.
- 16. †Kulpa, M. My thesis and research opportunities. Undergraduate Research Initiative, Bowling Green State University, OH, 2013.

POSTER PRESENTATIONS †Presenter, ‡ Author Only

1. †Kulpa, M.R., Benedict, B.M., Crouse, J.A., Thompson, D.P., Ramos, A.N., Sanders, T.L., Barboza, P.S., Verocai, G.G., Waiting in the wings: How recent arthropod sampling alters our understanding of vector-parasite assemblages of the northern Nearctic. Veterinary Medicine Biomedical Sciences Trainee Research Symposium, College Station, Texas, 2025.

- 2. Gomez, J., *Kulpa, M., Tyagi, N., Luksovsky, J., Thompson, D., Crouse, J., Verocai, G. Validation of a species-specific probe-based qPCR for detection of *Setaria yehi* in Alaskan moose (*Alces alces*). National Veterinary Scholars Symposium, Minneapolis, **2022**.
- 3. †Kulpa, M., Nelson, K., Morales, A., Ryan, B., Koschik, M., Scott, J., Verocai, G. Recently discovered cryptic species complex of *Onchocerca* found in black flies of northern California, USA. 28th International Conference of the World Association for Advancement of Veterinary Parasitology, Virtual, 2021.
- 4. Danks, H., Sobotyk, C., Saleh, M., *Kulpa, M., Luksovsky, J., Jones, L., Verocai, G. Opening a can of (lung)worms: molecular characterization of *Dictyocaulus* (Nematoda; Dictyocaulidae) infecting North American bison. National Veterinary Scholars Symposium, Virtual, 2021.
- 5. †**Kulpa**, **M**., Sykes, J. Morbidity and Mortality of White-Fronted and White-Throated Bee Eaters. Phi Zeta Research Day, Michigan State University, East Lansing, MI, **2018**.
- 6. †Kulpa, M., Agnew, D. Biofilm in the canine uterus. Veterinary Scholars Program Symposium at the National Institute of Health, Washington, D.C, 2017.
- 7. †Kulpa, M., Bak-Coleman, J., Coombs, S. Blind cavefish require the lateral line for rheotaxis in non-uniform flow. 51st Annual Animal Behavior Society Conference at Princeton University, Princeton, NJ, **2014**.
- 8. Sasikala-Appukuttan, A.K., *Kulpa, M., Husain, Z., Jackowska, M., Daines, B., Chen R., Jasper, H., Friedrich, M. A functional genomic screen for phototransduction genes in *Tribolium*. 53rd Annual Drosophila Research Conference at the Sheraton Chicago Hotel & Towers, Chicago, IL, **2012**.
- 9. Sasikala-Appukuttan, A.K., *Kulpa, M., Husain, Z., Jackowska, M., Daines, B., Chen R., Jasper, H., Friedrich, M. A functional genomic screen for phototransduction genes in *Tribolium*. Wayne State University Biological Sciences Retreat at the Cranbrook Institute of Science, Bloomfield Hills, MI, 2011.

AWARDS AND GRANTS

	D GIVILITY
2025	VMBS Outstanding PhD Student Award
	Given to a graduate student who excels in research, academics, and proposal submissions during their graduate studies.
2025	VMBS Graduate Student Research Trainee Grant (\$5,000)
	Research funds to help generate important preliminary data and aid in the submission of grant proposals to appropriate extramural agencies this year.
2025	GSA Summer Travel Award (\$1,000)
	Travel grant funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences – Graduate Student Association to travel to Annual American Association of Veterinary Parasitologists Meeting, St. Louis, MO.
2025	AAVP Young Investigator Travel Grant (\$700)
	Travel grant funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences – Graduate Student Association to travel to Annual American Association of Veterinary Parasitologists Meeting, St. Louis, MO.

2024-2025 Graduate and Professional School Dissertation Fellowship (\$24,000)

> Fellowship funded from Texas A&M University Graduate and Professional School to fund dissertation phase of their doctoral studies.

2024 GSA Summer Travel Award (\$935)

> Travel grant funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences – Graduate Student Association to travel to Annual American Association of Veterinary Parasitologists Meeting, Atlanta, GA.

2024 AAVP Young Investigator Travel Grant (\$700)

> Travel grant funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences – Graduate Student Association to travel to Annual American Association of Veterinary Parasitologists Meeting, Atlanta, GA.

2023 VMBS Graduate Student Advanced Developmental Training Grant (\$2,000)

> Training grant funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences to attend Parasitology summer course and workshop (ParSCo), Matera, Italy.

2023 AAVP Young Investigator Travel Grant (\$700)

> Travel grant funded from the American Association of Veterinary Parasitologists to travel to the Annual American Association of Veterinary Parasitologists Meeting, Lexington, KY.

2022 ASP Student Travel Grant (\$250)

> Travel grant funded from the American Society of Parasitologists to travel to register for the Annual American Society of Parasitologists Conference, College Station, TX.

2022 AAVP Young Investigator Travel Grant (\$700)

> Travel grant funded from the American Association of Veterinary Parasitologists to travel to the Annual American Association of Veterinary Parasitologists Meeting, Snowbird, UT.

2021 Texas A&M University Walter W. Lechner Estate Scholarship (\$2,000)

> Scholarship funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences to fund educational expenses.

2021 CVMBS PDA Travel Award (\$358.29)

> Travel grant funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences - Post-doctoral Student Association to travel to Annual American Association of Veterinary Parasitologists Meeting, Lexington, KY.

2021 AAVP Young Investigator Travel Grant (\$865)

> Travel grant funded from the American Association of Veterinary Parasitologists to travel to the Annual American Association of Veterinary Parasitologists Meeting, Lexington, KY.

2021 GSA Summer Travel Award (\$110)

> Travel grant funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences – Graduate Student Association to register for to the World Association for the Advancement of Veterinary Parasitology Conference, Virtual.

2020-2024 Texas A&M University Merit Scholars Fellowship (\$152,000)

> Fellowship funded from Texas A&M University School of Veterinary Medicine and Biomedical Sciences to fund the first four years of doctoral studies.

2019 Dehn Scholarship (\$2,000)

> Endowed scholarship funded from Michigan State University's College of Veterinary Medicine given to veterinary students.

2018 Class of 1957 Expanding Veterinary Horizons (\$800)

> Endowed scholarship funded from Michigan State University's College of Veterinary Medicine given to veterinary students.

2017 Boehringer Ingelheim Veterinary Scholars Summer Research Program (\$6,000)

> Scholarship funded from Michigan State University's College of Veterinary Medicine through Boehringer Ingelheim to fund summer research project.

2017 Banfield Pet Hospital Stipend for AVMA Legislative Fly-in (\$372)

Travel stipend funded from Banfield Pet Hospital to attend American Veterinary Medical

Associations 'Legislative Fly-in'.

2013-2014 Graduate Research Assistantship, Bowling Green State University (\$18,000)

Research assistantship funded from Dr. Sheryl Coombs Lab at Bowling Green State

University to conduct master's studies.

2012-2013 Graduate Teaching Assistantship, Bowling Green State University (\$18,000)

Teaching assistantship funded from Biology Department at Bowling Green State

University to conduct master's studies.

TEACHING EXPERIENCE

Fall 2017 General Histology, Tutor

> Supplemental learning for first year veterinary students taking General histology at Michigan State University's College of Veterinary Medicine General Histology class.

Spring 2013 Human Anatomy and Physiology Lab, Teaching Assistant

> Taught anatomical and physiological concepts using lectures, models and demonstrations to undergraduate students at Bowling Green State University.

Fall 2012 Concepts in Biology I Honors Lab, Teaching Assistant

> Taught foundational biology knowledge to undergraduate students in honors biology at Bowling Green State University. Topics included ecology, behavior, and evolutionary biology.

Spring 2010 Comparative Anatomy and Biology of Vertebrate, Undergraduate Teaching Aide
Helped prepare lectures and taught supplemental tutoring sessions to other undergraduate
students at Michigan State University. Content comprised vertebrate anatomy of different
species through the scope of evolutionary biology.

PROFESSIONAL MEMBERSHIPS

2024-2025	American Association of Wildlife Veterinarians (AAWV)
2024-2025	Society for the Study of Evolution (SSE)
2024-2025	National Science Policy Network (NSPN)
2023-2025	Wildlife Disease Association (WDA)
2020-2025	The American Association of Veterinary Parasitologists (AAVP)
2022-2024	American Society of Parasitology (ASP)

LEADERSHIP AND SERVICE

American Association of Veterinary Parasitologists, Student Committee Member
This committee represents the students of AAVP and supports their interest and activity
in the field of veterinary parasitology. Committee members are also responsible for
planning student-related events and helping review abstracts for the AAVP conference.

- American Association of Veterinary Parasitologists TAMU Club, Founder and President The mission of the American Association of Parasitologists Texas A&M Student Chapter (AAVP TAMU) is to expose all students, including undergraduates, graduates, and veterinary students, to the field of veterinary parasitology and foster future careers that envelope the cross disciplinary subject of parasitology.
- Verocai Lab Webpage (https://vetmed.tamu.edu/verocai-lab/), Content Manager Detailing new and ongoing research, events, collaborations, and media regarding the Verocai Lab at Texas A&M University.
- Wildlife Disease Association Student Committee (WDA CANUSA), Member at Large
 The Student Committee represents students and Student Chapters around the world. The
 committee coordinates, develops and supports activities to foster the growth of our future
 wildlife health professionals.
- 2023-2024 Parasite and Vectors, Manuscript Reviewer for Journal
- 2023-2024 Eminent Parasitologist Lectureship Award Committee, Member

The Eminent Parasitologist Lectureship Award is presented by the ASP to honor someone who exhibits eminence and international visibility for a substantial contribution to the field of Parasitology over a significant period of time.

2022-2023 TAMU Postdoctoral Association, Veterinary Pathobiology Representative
Helping to improve and maintain the post-doctoral community at Texas A&M University
by providing diverse professional development and networking opportunities.

2017-2018 Governmental Affairs Committee of SAVMA, State Advocacy Committee Liaison This committee informs veterinary students of pending and approved legislation that affects the veterinary profession and its students. GAC encourages and promotes the involvement of veterinary students in the legislative process and my position focused on state law (Michigan). 2016-2018 Wildlife Disease Association, Veterinary Liaison Veterinary student representative to recruit and disseminate WDA news and information to veterinary student body. 2016-2018 Student American Veterinary Medical Association, Delegate Chair Liaison to the national SAVMA organization and the Michigan State University College of Veterinary Medicine SAVMA branch. 2016-2019 Michigan Veterinary Medical Association, Member 2013-2014 Biology Graduate Student Association, Scientific and Educational Outreach Chair Graduate officer position to bring science enthusiasm and learning to undergraduate community through various events (e.g., Undergraduate Research Initiative). Biology Graduate Student Association, Treasurer 2012-2013 Graduate officer position that handles the financials of the BGSA organization.

PROFESSIONAL DEVELOPMENT

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2023	IX Annual ParSCo, Course Participant (Matera, Italy) ParSCo (Parasitology Summer Course) is a 1-week-long summer course in southern Italy planned for parasitologists and post-graduate students working in the field of parasitology. The course consists of theoretical and practical lessons, which include the collection, identification, and diagnosis of parasites of pets, livestock, and wildlife.
2021	Sydney Phylogenetics Workshop, Workshop Participant (Virtual) A 2-day workshop that introduces phylogenetic analysis, including practical exercises based on the software MEGA and BEAST 2.
2017	AVMA Legislative Fly-In Workshop, MSU CVM Representative (Washington, D.C.) AVMA event that brings veterinarians and veterinary students to Washington, D.C., for hands-on advocacy experience. Participants receive in-depth briefings about the top policy issues affecting veterinary medicine and meet with their members of Congress to advocate on those issues.
2011	Wolf Park Animal Care Internship, Intern (Battle Ground, IN) Responsible for the care, medication, and documentation of breeding season behavior of

socialized, captive-bred wolves.

COMMUNITY OUTREACH

Mar 2025 "Stand Up For Science 2025" (Austin, TX) Co-organized rally, press outreach, to call on policymakers, institutions, and the scientific community to uphold the integrity of science, protect its accessibility, and ensure its benefits to serve the community. Feb 2025 "Darwin Day" (College Station, TX) Taught adults and children about concepts in parasitology and veterinary medicine at Texas A&M University's botanical gardens. Mar 2024 "Darwin Day" (College Station, TX) Taught adults and children about concepts in parasitology and veterinary medicine at Texas A&M University's botanical gardens. Feb 2024 "Texas A&M Zoo, Exotics, and Wildlife Wet Lab" (College Station, TX) Demonstrated clinical fecal floatation and taught various concepts in parasitology to veterinary students. Dec 2023 "Expanding Your Horizons" (College Station, TX) An event to help develop young boys' and girls' (5th and 6th graders) interest in science and STEM careers. Taught about concepts in entomology and vector-borne disease. Dec 2023 "First Friday" - Parasitology Booth (Bryan, TX) Taught adults and children about concepts in parasitology and veterinary medicine at a community block event for the general public. Mar 2023 "Darwin Day" (College Station, TX) Taught adults and children about concepts in parasitology and veterinary medicine at Texas A&M University's botanical gardens. Feb 2023 "Texas A&M Zoo, Exotics, and Wildlife Wet Lab" (College Station, TX) Demonstrated clinical fecal floatation and taught various concepts in parasitology to veterinary students. "Texas A&M University Welcome Week: Inclusivity Fair" (College Station, TX) Aug 2022 Taught students about parasitology and distributed information regarding parasitology resources avaible through our lab. "Parasites on the Green" (College Station, TX) Jul 2022 Taught adults and children about concepts in parasitology during 2022 ASP conference at Century Square. Apr 2017 "Animal Brain Anatomy" (Grosse Pointe Woods, MI) Taught neuroanatomy, such as size and function in different animals, to students from $2^{nd} - 5^{th}$ grade.

TECHNICAL SKILLS AND CERTIFICATIONS

License: Michigan Veterinary License (2020-present)

Molecular: DNA extraction/purification, cPCR, qPCR, Deep amplicon sequencing (Illumina

and Nanopore platforms)

Diagnostic: Fecal Floatation, Modified McMaster (FEC), Mini-FLOTAC, Modified Knott's

Software: R Studio, DADA2/Mothur, SnapGene, ArcGIS

Phylogenetic: MEGA X (Molecular Phylogenetic Tree Analysis), PAUP4, SequenceMatrix,

Proalign 0.5, RAxML, MrBayes, CIPRES, FigTree, Jane 4.0

REFERENCES

Dr. Guilherme Verocai

Associate Professor, Texas A&M University

Email: gverocai@cvm.tamu.edu

Phone: 979-862-4999

Dr. Meriam Saleh

Clinical Assistant Professor, Texas A&M University

Email: msaleh@cvm.tamu.edu

Phone: 865-805-8664

Dr. Carol Sobotyk

Assistant Professor of Clinical Parasitology, University of Pennsylvania

Email: csobotyk@vet.upenn.edu

Phone: 215-898-8894