



News from the NCVP

SPRING 2024

SPECIAL POINTS OF INTEREST:

- **NCVP Leadership Updates**
- **Resident Successes**
- **NCVP in Atlanta for AAVP**
- **Grant Program Opens Soon**

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People

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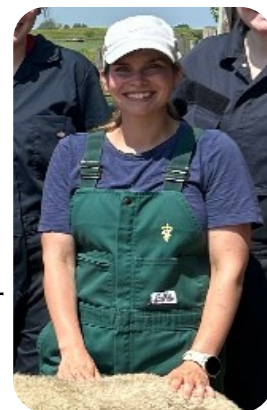
Above: Dr. Ranju Manoj

Congratulations to **Dr. Ranju Manoj, former Merck Animal Health Resident in Veterinary Parasitology**, and **Dr. Katy Martin, Elanco Resident in Veterinary Parasitology**, for passing the 2023 ACVM parasitology boards! Katy studied under the direction of Dr. Matt Brewer at Iowa State University and will complete her PhD in Fall 2024. Ranju, while in a two-year residency program, was mentored by Dr. Mani Lejeune at Cornell University.

During their time with NCVP, Katy and Ranju solidified their passion for parasitology and both seek opportunities in veterinary parasitology teaching and research.

It takes many hours (days, months, years!) to prepare for board exams and NCVP is proud to have two more NCVP residents on the ACVM diplomate list. For all those preparing for the 2024 ACVM parasitology boards, these two might have some study advice!

Congratulations to both Katy and Ranju!



Above: Dr. Katy Martin

Former NCVP Resident Returns as Co-Director



Above: Dr. Kathryn Duncan

We are pleased to announce **Dr. Kathryn Duncan, DVM, PhD, DACVM (Parasitology), former Boehringer Ingelheim Resident in Veterinary Parasitology**, has rejoined NCVP as a co-director.

Kathryn completed her NCVP residency under the direction of Dr. Susan Little and obtained her PhD at Oklahoma State University in 2022; she recently returned to Oklahoma State University as an assistant professor. In addition to teaching parasitology and leading a research laboratory, she'll be actively engaged with the NCVP Advisory Board and residents in supporting and furthering the educational mission of NCVP.

Welcome back Kathryn!

Next Chapter for Co-Founders of NCVP

As every parasitologist (and Pete Seeger) knows, “to everything there is a season.” After working with the NCVP for many years to help secure the future of veterinary parasitology, and with full confidence that the Center will continue to thrive in the very capable hands of the new leadership team, two key, founding NCVP board members – Dr. Susan Little and Dr. Mason Reichard – have recently left Oklahoma State University (OSU).



Above: Dr. Little (left) and Dr. Reichard (right) at an OSU Awards Ceremony being recognized with the Leave the Ladder Down Award (Little) and Regents Excellence in Teaching Award (Reichard).

Susan, originally from rural Kentucky, came to OSU from the University of Georgia where she

was a tenured Associate Professor. She joined the OSU veterinary college faculty in 2005 as the Krull-Ewing Professor in Veterinary Parasitology and set about building a research team focused on ticks, zoonotic parasites, and vector-borne infections. Under Susan’s guidance, graduate students and researchers in her lab identified novel vector-borne agents in North America, documented geographic expansion of ticks and tick-borne infections, delineated key features of tick biology and phenology, and explored diagnostic test performance and parasite control product efficacy. Susan enjoyed teaching veterinary and graduate student courses and providing continuing education to veterinarians across the globe. During her time at OSU, in addition to her work with NCVP, Susan served as president of both AAVP and CAPC and was instrumental in securing a route for board certification in veterinary parasitology through the ACVM. Susan left OSU in January 2024, and in May, she and husband Rod will be relocating to northern Vermont where she will consult in parasitology (and he plans to fish).

Mason, originally from St. Louis, Michigan, moved to Stillwater, OK in August 1999 for graduate research under the direction of Dr. Alan Kocan. After graduating in 2003, Mason worked on several post-doctoral research projects and was a lecturer before joining the faculty at OSU in the Department of Veterinary Pathobiology in 2006. Mason’s research lab investigated ticks and tick-borne diseases with a primary focus on transmission of *Cytauxzoon felis* from *Amblyomma americanum* to domestic cats. Mason’s lab also investigated the role of wild animals as reservoirs for zoonotic parasites particularly *Trichinella* spp. and *Toxoplasma gondii*. During his time at OSU, Mason’s primary teaching responsibility was instruction of basic and clinical parasitology to the veterinary students. He also taught graduate courses in wildlife diseases. Mason is past-president of AAVP and together with Susan, Dr. Anne Zajac, and Dr. Gary Conboy, co-authored the 9th edition of Veterinary Clinical Parasitology. In October 2023, Mason left OSU and joined Zoetis as a Parasitology Field Specialist. Mason and wife Jennifer have moved to Hancock, New Hampshire where Mason works remotely and Jennifer commutes to TuftsVETS in Walpole, MA.

Thank you, thank you, thank you Susan and Mason for your contributions to NCVP!

National Center for Veterinary Parasitology: Version 2.0



We are also delighted to share that as of January 2024, Drs. Lindsay Starkey and Kathryn Duncan have joined Dr. Ruth Scimeca, all faculty members in veterinary parasitology at OSU and all former NCVP residents, as co-directors of NCVP. Kellee Sundstrom will continue in her critical role as Project Manager to complete the NCVP leadership team at OSU. Drs. Reichard and Little will remain engaged with the board for the next two years, assisting with the transition to new leadership, and we have no doubt that the NCVP will move on to even greater success, providing key support for veterinary parasitologists across North America in their efforts to meet emerging needs in the discipline.

We are excited for the future of NCVP!

Welcome to Atlanta Where the Parasitologists Play

Please plan to join NCVP and our AAVP colleagues as we enjoy the 69th Annual Meeting of the American Association of Veterinary Parasitologists (AAVP) in Atlanta, Georgia July 27–30, 2024.



Here are the NCVP must-dos:

1. NCVP-AAVP Case Session

This annual event features cases from parasitology residents across North America, both NCVP and beyond. Join this interactive session to learn about parasites and have a great time.

2. NCVP Giveaways and Information Table

During the breaks, NCVP will have our informational table stocked with new parasitology-themed giveaways and educational content. Come learn more about resident funding, grant opportunities, and outreach efforts.

3. NCVP Student Scavenger Hunt

Students should stop by the NCVP Table to begin this fun and unique scavenger hunt. Collect items for a chance to win a special prize.

We cannot wait to see you there!



Above: Dr. Sarah Myers, Boehringer Ingelheim Resident in Veterinary Parasitology, presenting at last year's NCVP case session.



Travel Size Tick Kits—They Are Fantas-Tick



For instructors at veterinary colleges in the US and Canada, NCVP is preparing updated tick sets. In years past, NCVP has supplied arthropods (including ticks!) suspended in gel sanitizer to allow the specimens to be preserved and easily observed. To make the sets more transportation-friendly, this year we'll be immersing ticks in resin. This new set will feature six tick species in resin for durability and stability. The specimens can be removed from their travel kits for viewing under a microscope.



We hope these kits will last for many years. Be on the lookout for the tick sets arriving at veterinary colleges by the end of 2024. Resin-fixed ticks will also be on display at AAVP, so please stop by the NCVP table to check them out!



We believe every veterinary college should have a tick kit!

The Monthly Chronicle

NCVP Case of the Month continues!

Dive deeper into the captivating world of parasitology with our Parasite Case of the Month. Each month, we unveil an intriguing parasitic case that pushes the boundaries of your knowledge. Head over to <https://www.ncvetp.org/case-of-the-month> to test your skills!

December 2023

Christmas surprise

A 2-year-old female Mongolian gerbil was submitted for necropsy to determine the cause of death as the owner has had multiple losses in the household. During necropsy, six specimens collected from the proximal area of the small intestine were incidentally found. All of the specimens recovered were identified as females containing spindle shaped eggs that measured 115 μm to 140 μm by 30 μm to 60 μm . (Images 1-3).

Case provided by: Tiana Sanders DVM, PhD Student, Texas A&M

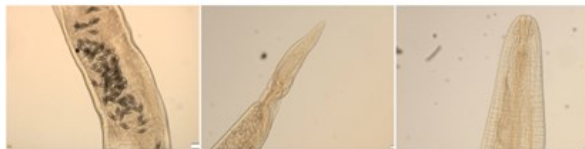


Image 1: Eggs, 10x

Image 2: Caudal end, 10x

Image 3: Anterior end, 10x

January 2024

Hope for a New Year's resolution

A parakeet pet was presented to the College of Veterinary Medicine Clinic, Southwestern University in Philippines, with localized thickened, crusty lesions on the legs and feet, and scales lifting off on the area. No signs of pruritus were noticed. (Images 1-3)

Microscopic examination of loose leg scales revealed the following. (Image 4)

Case contribution:

Erlah Sherraine Roble, DVM, Assistant Professor at the College of Veterinary Medicine, Southwestern University PHINMA, Philippines



Have a fascinating case to share? Please consider submitting to ncvp@okstate.edu for a feature on Case of the Month.

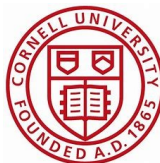
Multi-institutional NCVP Research Published

IDEXX Laboratories, Inc. (NCVP sponsor) and the NCVP embarked on a multi-center collaborative survey of pet and shelter dogs for flea tapeworms. Through the NCVP network of current and former residents, co-authors at six academic veterinary institutions were identified (Auburn, Cornell, Florida, Iowa State, Oklahoma State, and Texas A&M). Each collaborator solicited samples for evaluation by traditional diagnostics and testing with a novel coproantigen assay for *Dipylidium caninum* that is now validated and commercially available.



IDEXX Resident in Veterinary Parasitology and co-author, Dr. Timothy Wu, presented results at the 2023 AAVP meeting in Lexington, KY. As expected, more tapeworm infections were identified as a result of inclusion of the novel diagnostic versus relying on classical techniques alone. Full details can be found in: Little et al., 2023. Diagnosis of canine intestinal parasites: Improved detection of *Dipylidium caninum* infection through coproantigen testing. *Vet Parasitol.* Dec;324:110073.

Congratulations everyone on this successful collaboration!



Grant Program Leads to Publication and Graduation!



Above: Drs. Amanda Beckman, Sarah Hamer, and Rachel Busselman at hooding ceremony. Image source: vetmed.tamu.edu/hamer-lab/.

Each year the **NCVP grant program** provides multiple researchers with the opportunity to conduct important research that directly benefits veterinary parasitology.

A recently published article entitled "Abundant triatomines in Texas dog kennel environments: Triatomine collections, infection with *Trypanosoma cruzi*, and blood feeding hosts" was the product of a grant awarded to Dr. Sarah Hamer at Texas A&M and the PhD work of Dr. Rachel Busselman.

This practical and timely publication gives veterinary professionals in Texas up-to-date information on the true level of risk for *Trypanosoma cruzi* infection in dogs. The co-authors also suggest valuable control options and intervention efforts.

For more information about the NCVP grant program, please see NCVetP.org. The 2024 submission portal will open in a few months.

We love hearing about the success of our grant recipients!

Select Publications from NCVP Residents

Below is an abridged list of recent publications from **current NCVP residents**¹. To request the full list or individual reprints, please send an email to ncvp@okstate.edu.

- **Ammar S**¹, Dawant TJ, Kelly J, Hickling G, Brown J, Van Why K, Poulson R, Su C, Gerhold R. *Toxoplasma gondii* survey in waterfowl and gulls from eight US states. *J Wildl Dis.* 2024. doi: 10.7589/JWD-D-22-00132. Online ahead of print.
- Carroll AAE, Champion CP, Westermann T, **Wu T**¹. Sudden death in a 10-month-old female Manchurian ring-necked pheasant (*Phasianus colchicus*). *J Am Vet Med Assoc.* 2024. doi: 10.2460/javma.23.12.0705. Online ahead of print.
- Dawant T, Wang W, Spriggs M, Magela de Faria Junior G, Horton L, **Szafranski NM**¹, Waap H, Jokelainen P, Gerhold RW, Su C. Isolation of *Toxoplasma gondii* in cell culture: an alternative to bioassay. *Int J Parasitol.* 2023. doi: 10.1016/j.ijpara.2023.12.002. Online ahead of print.
- Hardman RH, **Ammar S**¹, Gerhold R, Sutton W, Carter ED, Snyder S, Neto JDS, Tarkington M, Gray MJ, Miller DL. Coccidiosis in Wild Eastern Newts (*Notophthalmus viridescens*): an unexpected finding in consecutive mortality events in Tennessee, USA. *J Wildl Dis.* 2023. 59(3):479-86.
- Kuo JT, **Wu T**¹, Lucio-Forster A. *Baylisascaris procyonis* (Raccoon roundworm). *Trends Parasitol.* 2023. doi: 10.1016/j.pt.2023.12.002. Online ahead of print.
- Little S, Braff J, Duncan K, Elsemore D, Hanna R, Hanscom J, Lee A, **Martin KA**¹, Sobotyk C, Starkey L, Sundstrom K, Tyrrell P, Verocai GG, **Wu T**¹, Beall M. Diagnosis of canine intestinal parasites: improved detection of *Dipylidium caninum* infection through coproantigen testing. *Vet Parasitol.* 2023. 324:110073.
- Manoj RRS, **Wu T**¹, Bolfa P, Lim A, Young R, Lejeune M, Ketzis J. Evaluation of parasitic infections with histological and molecular detection in Anoles from St. Kitts. *Vet Parasitol Reg Stud Reports.* 2024. 47:100957.
- **Martin KA**¹, Jesudoss Chelladurai JRJ, Bsrat A, Pulaski C, Lee ACY, Starkey LA, Brewer MT. Haplotypic analysis of *cox1* from *Toxocara canis* demonstrates five distinct clades that are not geographically defined. *PLoS Negl Trop Dis.* 2023. 17(10):e0011665.
- **Martin KA**¹, Kovach K, Moscoso E, Carreiro E, Jesudoss Chelladurai JRJ, Brewer MT. Assessment of in vitro efficacy for common surface disinfectants and antiseptics against *Tritrichomonas foetus* trophozoites. *Front Vet Sci.* 2023. 10:1282274.
- **Myers S**¹, Clow K, DeWinter S, Sundstrom K, Little S. Multiple species of canine *Rhipicephalus* complex detected in Canada. *Vet Parasitol Reg Stud Reports.* 2024. 48:100976.
- **Myers S**¹, Duncan K. *Dermacentor variabilis* (American dog tick). *Trends Parasitol.* 2024. 22:S1471-4922(24)00001-1.
- **Myers S**¹, Little SE. Top tips for managing home and kennel infestations with Brown Dog Ticks. *Today's Veterinary Practice.* 2024. March/April.
- **Wu TK**¹, Kaneko S, Lucio-Forster A, Spagnoli S, Schultz-Powell L, Liotta J, Bowman D. Cestodiasis in 2 Puerto Rican crested anoles. *J Vet Diagn Invest.* 2024. doi: 10.1177/10406387241229072. Online ahead of print.

About the National Center for Veterinary Parasitology

Veterinary parasites impact human health and society in many ways. With the **generous support of our sponsors**, the National Center for Veterinary Parasitology works to promote greater understanding and control of parasitic diseases in animals through innovative partnerships between academia and industry.



Housed in the College of Veterinary Medicine at Oklahoma State University, the Center strives to create future generations of veterinary parasitologists, conduct targeted research, and provide diagnostic and consulting services worldwide. To learn more, please visit ncvetp.org.



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