

SPECIAL POINTS OF INTEREST:

- **New NCVP Resident!**
- **NCVP 2021 AAVP Awardees**
- **NCVP participation at AAVP 2021**
- **NCVP Annual Fall Meeting**

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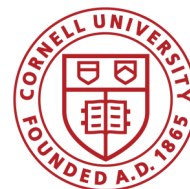
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Welcome to NCVP's Newest Resident — Dr. Ranju Manoj



Dr. Ranju Manoj, Merck Resident in Veterinary Parasitology

Dr. Ranju Manoj, who is completing her PhD with Drs. Domenico Otranto and Maria Stefania Latrofa at the University of Bari, Italy, will be joining the NCVP as the **Merck Resident in Veterinary Parasitology**. As part of her training to prepare for board examination in Parasitology through the American College of Veterinary Microbiologists, Ranju will undertake two years of intensive residency training at the Animal Health Diagnostic Center at Cornell University's College of Veterinary Medicine under the guidance of **Drs. Mani**



Lejeune and Dwight Bowman. Ranju earned both a BVSc and MVSc at Madras Veterinary College in Chennai, India. Ranju's research since that time has focused on molecular parasitology with a particular emphasis on vector-borne zoonotic pathogens. While completing her PhD through an international fellowship at the University of Bari, Ranju also had the opportunity to work for a few months at Aix Marseille University in the Microbes, Evolution, Phylogeny, and Infection Research Unit. **Welcome Ranju – we look forward to working with and learning from you!**



Dr. Kathryn Duncan 2021 CAPC-AAVP Awardee!



Dr. Duncan (left) wins 2021 AAVP-CAPC award

Congratulations are in order for **Dr. Kathryn Duncan**, the BI Resident of the NCVP! Kathryn received the **2021 AAVP-CAPC Graduate Student Award in Zoonotic Disease** for her dissertational research focused on ticks and tick-borne infections in North America. Kathryn is currently conducting her research under the mentorship of **Dr. Susan Little** at the Oklahoma State University's College of Veterinary Medicine. Her research interests include tick-borne diseases, heartworm, and diagnosis and treatment of intestinal parasites of domestic animals.



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Boehringer Ingelheim

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(article on awardee Kathryn Duncan continued...)

Recent publications include documentation of winter ticks on dogs and cats, identification of *Dermacentor variabilis* as predominating on pets throughout North America, and characterizing pathogens in *Dermacentor* spp. Kathryn passed her oral and written qualifying examinations in November 2020, and is currently on track to graduate in May 2022. She plans to take the Parasitology board exam in November 2022. Kathryn is a 2018 graduate of the University of Tennessee's College of Veterinary Medicine, and had the distinct privilege (and entertainment!) of working with parasitologists extraordinaire Drs. Rick Gerhold and John Schaffer while at UT. **Congrats on the prestigious award, Kathryn!** Keep up the outstanding work – we can't wait to see where you land after graduation!

Dr. Peregrine Named 2021 AAVP Distinguished Parasitologist

A hearty congratulations to Dr. Andrew Peregrine, veterinary parasitologist at the University of Guelph, NCVP Advisory Board Member, and the **2021 recipient of the Distinguished Veterinary Parasitologist Award from the American Association of Veterinary Parasitologists.**

Dr. Peregrine earned his DVM and PhD from University of Glasgow, Scotland and spent the early years of his career at the International Laboratory for Research on Animal Diseases in Kenya before joining the faculty at Ontario Veterinary College. Andrew's research program on emerging parasite issues in both small and large animals has international impact and is transforming our understanding of anthelmintic resistance and zoonotic risk.



Dr. Andrew Peregrine, University of Guelph, 2021 Distinguished Veterinary Parasitologist



Dr. Peregrine is also a very well-regarded teacher and recipient of numerous teaching and mentoring awards including the Canadian Veterinary Medical Association Teacher of the Year Award, the Pfizer Distinguished Teacher Award, the University of Guelph Distinguished Professorial Teaching Award, and the Broad Spectrum Award.

Congratulations Andrew – NCVP and veterinary parasitology are very lucky to have you!

Dr. Szafranski Takes First Place at UT Research Day!

Wow! **Dr. Nicole Szafranski**, the Zoetis Resident in Veterinary Parasitology at the University of Tennessee, received the **1st Place Presentation Award** for her research presentation entitled

"Investigation of the prevalence of *Toxoplasma gondii* in North American waterfowl" at the recent College of Veterinary Medicine Research day. Dr. Szafranski's mentor is Dr. Rick Gerhold. Incidentally,

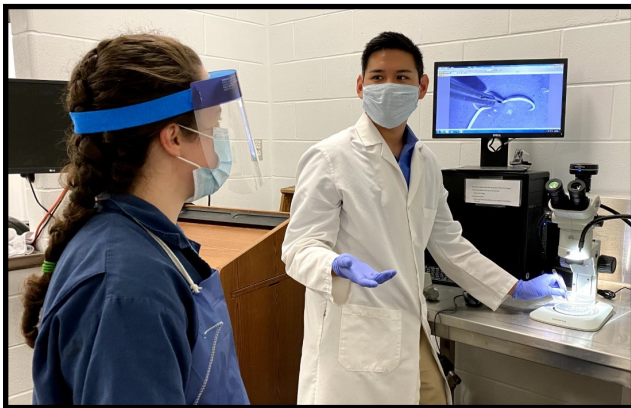
Dr. Gerhold was also recognized at the event with the Boehringer Ingelheim Faculty Research Mentoring Award for his commitment to training and promoting graduate students.

Well done Nicole (and Rick!) - we are so proud of you!



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Resident Dr. Timothy Wu Now Boarded in Anatomic Pathology



The NCVP is delighted to share the news that **Dr. Timothy Wu**, the IDEXX Resident in Veterinary Parasitology at Cornell University, is now a board certified anatomic pathologist through the American College of Veterinary Pathologists. Timi had a keen interest in the interface between pathology and parasitology when he graduated from Cornell's veterinary program in 2017 and so first completed a pathology residency at Cornell in 2020 before

starting his PhD under the direction of Dr. Dwight Bowman, Professor and NCVP Advisory Board member, and his parasitology residency training with Dr. Mani LeJeune, Director of Clinical Parasitology. When all is said and done. Dr. Wu will be a phenomenally well-trained DVM/PhD scientist with credentials in both parasitology and pathology and ideally positioned to integrate these two dynamic fields.

Nice work, Timi. So glad you are an NCVP Resident!



Thank you for serving on the NCVP Board, Dr. Geary!



Dr. Tim Geary (left) will be stepping down as an NCVP board member. Tim graciously joined the NCVP board in Fall 2017 and has been a stalwart advisor since. Even before Tim formally joined the NCVP, he was a strong supporter of our mission, constantly offering words of encouragement and advocating on our behalf to anyone who would listen. His position and advocacy did not change once he joined the board and we have always relied on his sagacious advice and fearless leadership. We really could not

have done it without him and will greatly miss his levity and presence at board meetings. We'll always be in his debt for his selfless service and support to NCVP. And even though Dr. Geary claims to be retired, we take considerable comfort knowing we can always rely on his advice and that we'll see him at future conferences. **Thank you Tim!**

The Zajac Legacy Continues...

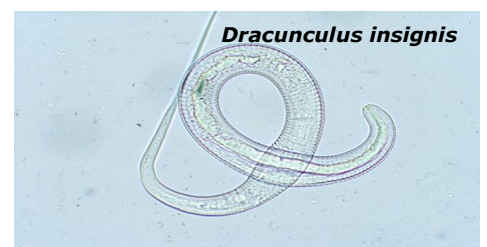
Dr. Anne Zajac (right), Emerita Professor of Parasitology (Virginia Tech) and NCVP Board Alum, has graciously donated hundreds of **original Kodachrome parasite images** taken throughout her career to the NCVP. We are in the process of curating and digitizing images for archiving in the NCVP database (www.ncvetp.org). Featured parasites in the exclusive Zajac collection range from the wee to the whopping, the exotic to the notorious, and the beautiful (in the eye of the parasitologist beholder) to the heinous. **Thank you Dr. Zajac** for your continued contributions and dedication to veterinary parasitology to further enrich the field even after your well-deserved retirement! **A sneak peak of Zajac collection below:**



Thelazia sp.



Filariid in canine liver



Dracunculus insignis

NCVP Residents Represent at 2021 Annual AAVP Meeting



For the 2021 hybrid AAVP meeting, there was active participation from the NCVP. Residents presented in oral, poster, and plenary sessions, and of course the crowd favorite clicker case discussions.

Below are highlights of Resident research presentations:

- **Dr. Kathryn Duncan**, BI Resident in Veterinary Parasitology (Oklahoma State University), 1) Diversity of *Rickettsia* spp. in *Dermacentor* spp. from across the United States; 2) Equine tick-borne rickettsial infections in northeastern Oklahoma
- **Dr. Katy Martin**, Elanco Resident in Veterinary Parasitology (Iowa State University), Bovine trichomonosis cases in the United States 2015–2019
- **Dr. Caroline Sobotytk**, Merck Resident in Veterinary Parasitology (Texas A&M University), 1) Autochthonous, zoonotic *Onchocerca lupi* in a South Texas dog, United States; 2) Assessing the field performance of a cell-phone based video-microscope for diagnosing heartworm infection in dogs
- **Dr. Nicole Szafranski**, Zoetis Resident in Veterinary Parasitology (University of Tennessee), Vector-borne and blood-borne parasitic disease prevalence survey in wild Texas ocelots (*Leopardus pardalis*) and bobcats (*Lynx rufus*)

NCVP AAVP 2021 Clicker Session Goes Wild!

From *Dictyocaulus* in an elk to *Strigidae* on a black backed gull, the NCVP clicker session 2021 had it all! Thanks to this year's NCVP residents and presenters at the 66th AAVP annual meeting, we had an amazing array of clinical cases that were very well presented. As always we learned new interesting information on diverse parasites in an interactive way. Presenting residents this year included **Dr. Nicole Szafranski** (Zoetis, University of Tennessee), **Dr. Katy Martin** (Elanco, Iowa State University), **Dr. Kathryn Duncan** (Boehringer Ingelheim, Oklahoma State University), **Dr. Caroline Sobotytk de Olivera** (Merck, Texas A&M University) and **Dr. Timothy Wu** (IDEXX, Cornell University). This year's cases were led by parasitologists Dr. Gui Verocai (Texas A&M) and Dr. Mani Lejeune (Cornell University) adding their valuable knowledge to the hybrid session. There were approximately 100 attendees (IRL and virtual!). We are looking forward to the next NCVP clicker session in 2022! Special thanks to the sponsors and attendees for making this possible.

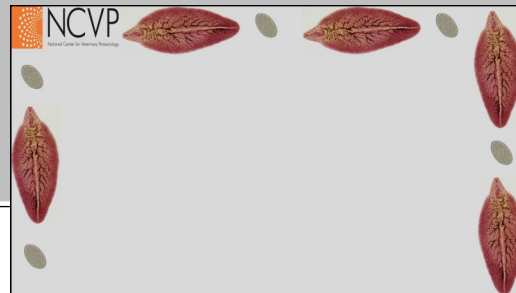




NCVP Virtual with AAVP in 2021 Makes Zoom... a Little More FUN!

The NCVP had a strong presence at the 66th Annual American Association of Veterinary Parasitologists Meeting with residents, board members, and grant recipients presenting on their research. The NCVP hosted a **virtual table** and sent out our temporary tattoos and NCVP pens to our virtual visitors in both the United States and Canada. New this year? NCVP unveiled a variety of **parasite backgrounds** (like the one capturing this article) during AAVP. These backgrounds are still **available on the NCVP website** for use to fill your next Zoom meeting background with parasites! Just a way to make Zoom a little more fun!

Some other backgrounds below are available at ncvetp.org!



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Fall 2021 NCVP Meeting of the Board and Residents



This October, NCVP Board members and Residents gathered virtually to discuss current projects, outreach activities, and goals for the future. Also, Fall meetings are when the Residents provide exciting updates as to what they have been up to research-wise, exciting/cool cases they have experienced in diagnostics, and clinical training. Our Residents are doing amazing things! We are hopeful (again) that our Spring meeting can take place in person. In the meantime, our individual and collective passion for veterinary parasitology and dedication to advancing the field compel us to meet however we can in the face of COVID.

Until then, we greatly appreciate everyone's flexibility and commitment to keep NCVP moving forward and accomplishing our mission.

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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Select Publications from NCVP Residents and Grant Recipients

Below and continued on the following page is a very abridged list of just a few of the recent publications from NCVP residents and former grant recipients. To request the full list or individual reprints, please send an email to ncvp@okstate.edu. Most importantly, feel free to send us your suggestions for future continuing education articles, review papers, or topics you think would be of interest to veterinarians and others in parasitology.

- Criscione CD, van Paridon BJ, **Gilleard JS**, Goater CP. Clonemate cotransmission supports a role for kin selection in a puppeteer parasite. *Proc of Natl Acad Sci USA*. 2020. 117:5970—5976.
- **Jesudoss Chlladurai JRJ**, Fales-Williams A, Brewer MT. Contraecaeciasis in an American white pelican. *Vet Parasitol Reg Stud Reports*. 2020. 22:100484.
- Kolapo TU, Bouchard É, Wu J, Bassil M, Revell S, Wagner B, Acker JP, **Jenkins EJ**. Copro-polymerase chain reaction has higher sensitivity compared to centrifugal flotation in the diagnosis of taeniid cestodes, especially *Echinococcus* spp., in canids. *Vet Parasitol*. 2021. 292:109400.
- Kotwa JD, Schnyder M, Jardine CM, Deplazes P, Pearl D, Berke O, Mercer N, **Peregrine A**. Investigation of the occurrence of *Angiostrongylus vasorum* in coyotes in southern Ontario, Canada. *J Vet Diagn Invest*. 2021. 33:664—669. .

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- Kotwa JD, French SK, Greer T, Elsemore DA, Hanna R, Jardine CM, Pearl DL, Weese JS, Mercer N, **Peregrine AS**. Prevalence of intestinal parasites in dogs in southern Ontario, Canada, based on fecal samples tested using sucrose double centrifugation and Fecal DX tests. *Vet Parasitol Reg Stud Reports*. 2021. 26:100618.
- **Lineberry ML**, Sundstrom KD, Little SE, Allen KE. Molecular detection of *Cercopithifilaria bairdii* in brown dog ticks collected from dogs across the United States. *Vet Parasitol*. 2021. 299:109583.
- Little S, **Duncan K**. Ear mites: Uncovering, treating, and preventing infestations. *Today's Veterinary Practice*. July/August 2021.
- **Martin KA**, Henderson J, Brewer MT. Bovine trichomonosis cases in the United States 2015-2019. *Front Vet Sci*. 2021. 8:692199.
- Park JY, **Sobotyk C**, Edwards EE, Porter BF, Verocai GG. Fatal cerebral cuterebrosis in a dog. *Vet Parasitol Reg Stud Reports*. 2021. 26:100636.
- **Rodriguez JR**, Finneburgh BM, Lewis BC, Flanagan J, **Snowden KF**. *Heterobilharzia americana* infection in a Grant's zebra (*Equus burchelli boehmi*). *Vet Parasitol Reg Stud Reports*. 2021. 23:100495.
- Schurer JM, Tsybina P, Gesy, KM, Kolapo TU, Skinner S, Hill JE, **Jenkins EJ**. Molecular evidence for local acquisition of human alveolar echinococcosis in Saskatchewan, Canada. *Journal Infect Dis*. 2021. 223:1015–1018.
- **Sobotyk C**, Upton KE, Lejeune M, Nolan TJ, Marsh AE, Herrin BH, Borst MM, Zajac AM, Camp LE, Pulaski CN, Starkey LA, von Simson C, Verocai GG. Retrospective study of canine endoparasites diagnosed by fecal flotation methods analyzed across veterinary parasitology diagnostic laboratories, United States, 2018. *Parasit Vectors*. 2021. 14:1–10.
- **Sobotyk C**, Foster T, Callahan RT, McLean NJ, Verocai GG. Zoonotic *Thelazia californiensis* in dogs from New Mexico, USA, and a review of North American cases in animals and humans. *Vet Parasitol Reg Stud Reports*. 2021. 24:100553.
- Sundstrom KD, Lineberry MW, Grant AN, **Duncan KT**, Ientile MM, Little SE. Equine attachment site preferences and seasonality of common North American ticks: *Amblyomma americanum*, *Dermacentor albipictus*, and *Ixodes scapularis*. *Parasit Vectors*. 2021. 14:404.
- Verocai GG, **Sobotyk C**, Lamison A, Borst MM, Edwards EE. Autochthonous, zoonotic *Onchocerca lupi* in a South Texas dog, United States. *Parasit Vectors*. 2021. 14:1–4.

