

SPECIAL POINTS OF INTEREST:

- All NCVP Residents receive awards at AAVP 2014
- NCVP awareness at AAVP
- NCVP Resident training programs
- Research funds for veterinary parasitology
- Continuing education efforts

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Awards and Accolades



Dr. Alice Lee Receives Outstanding Graduate Student Award



Congratulations to **Dr. Alice Lee**, PhD candidate and NCVP Novartis resident, who received the 2014 AAVP -Merck Animal Health Outstanding Graduate Student Award. Dr. Lee, who is originally from Taiwan and grew up in Toronto, Canada, earned her DVM from Ontario Veterinary College, University of Guelph. She is currently working toward her PhD under the advisement of Dr. Dwight Bowman, Cornell University, researching less invasive methods to evaluate canine anthelmintic efficacies and the dynamics of *Toxoplasma gondii* and *Toxocara canis* co-infection in mice. On the opening night of AAVP in Denver, Colo., Dr. Lee accepted the prestigious award and spoke to a room full of meeting attendees regarding her research on antibody-mediated trapping of *Toxocara* larvae in mice. Very well done, Alice!



Advisor **Dr. Dwight Bowman** proudly looks on as Alice is presented with the 2014 Merck Outstanding Graduate Student Award by AAVP President-elect **Dr. Andrew Peregrine**.

Dr. Lindsay Starkey Does it Again!



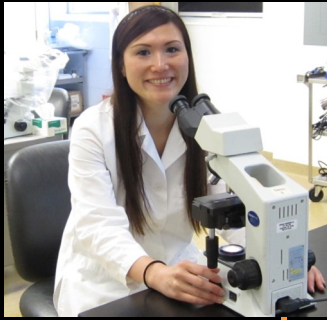
Bayer resident **Dr. Lindsay Starkey** placed second in the 2014 AAVP student competition for her presentation entitled "Prevalence of vector-borne pathogens in dogs from Haiti." Lindsay is a fantastic speaker. She has won



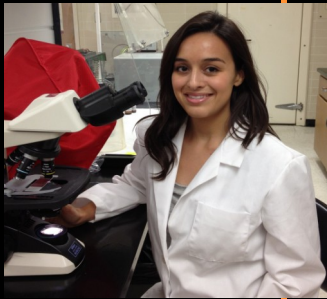
Lindsay stands for a photograph with **Dr. Peregrine** after receiving AAVP student competition award.

several competitions including the 2010 AAVP student presentation session (first place) and the 2014 3-minute thesis competition within Oklahoma State University's Center for Veterinary Health Sciences. Great job, Lindsay!

Awards and Accolades Continued...



Dr. Yoko Nagamori



Dr. Jessica Rodriguez

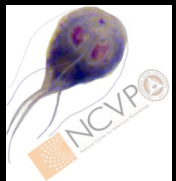
Drs. Nagamori and Rodriguez Receive Honorable Mention

Dr. Yoko Nagamori, NCVP resident, and Dr. Jessica Rodriguez, NCVP Merial Resident, both received Honorable Mention in the student presentation competition at AAVP 2014 for their presentations "Association between nymphal engorgement weight and sex of adult *Amblyomma americanum*, *Amblyomma maculatum*, *Dermacentor variabilis*, and *Rhipicephalus sanguineus*" and "Detection of circulating anodic antigen in raccoons naturally infected with *Heterobilharzia americana* and comparison of test performance with fecal sedimentation and fecal PCR," respectively. Way to go, Yoko and Jessica!



Above: Andrew Peregrine presents Yoko (first student from right) with Honorable Mention Award in the student presentation competition as Jessica (first from left) looks on after receiving her award. Dr. Daniel Snyder, NCVP Elanco and "sponsor representative announces the awards.

2014 Tattoos:



NCVP at AAVP 2014



NCVP Promotional Table Continues to Expand Awareness



NCVP Co-Director Dr. Mason Reichard helps set up the NCVP promotional table at AAVP 2014. "Swag" available included parasite temporary tattoos, pre-loaded USB flash drives with videos, NCVP brochures, and "Feces" (not Reese's) candies.

The NCVP promotional table this year again offered brochures, temporary tattoos and NCVP branded and pre-loaded USB drives to AAVP meeting attendees. Tattoos included those distributed during AAVP 2013 and new "ink" of *Cimex*, a *Giardia* trophozoite, *Ancylostoma caninum* cutting teeth, and a *Haemonchus* female engorged with blood. In addition to parasite videos available on USB drives last year, new parasite "digital shorts" featured *Mesocystoides* oncospheres, a hatching/swimming *Heterobilharzia* (continued on the following page...)

americana miracidium, a questing *Dermacentor variabilis*, and a live, inching *Cuterebra* larva.

Edible promotional items were "Feces Pieces" and "Feces Poonut Butter Cups," which were quite popular as evidenced by the need for continual restocking. NCVP members staffed the table between sessions and during breaks to speak with interested perusers about the NCVP.

In the photograph to right, NCVP Project Leader Dr. Kelly Allen (behind table) and NCVP Zoetis sponsor representative Dr. Joyce Login (first from left) speak with Dr. Joe Dedrickson from Merial Limited and Dr. Tom McTier from Zoetis, who peruse the NCVP table during a meeting break at AAVP 2014.



NCVP Member Research Presentations

NCVP members were very active in AAVP this year, with all residents and numerous board members presenting, some giving several talks. Research topics and speakers are listed below and on the following page.

NCVP Residents:

- Antibody-mediated trapping of *Toxocara canis* larvae within the murine liver upon challenge infection (2014 AAVP-Merck Outstanding Graduate Student Talk)—**Dr. Alice Lee** (see front page)
- Assessing the speed of kill of *Ancylostoma caninum* by Advantage Multi® for dogs using endoscopic methods—**Dr. Alice Lee**
- Prevalence of vector-borne pathogens in dogs from Haiti—**Dr. Lindsay Starkey**
- Detection of circulating cathodic antigen and circulating anodic antigen in raccoons naturally infected with *Heterobilharzia americana* and comparison of test performance with fecal sedimentation and fecal PCR—**Dr. Jessica Rodriguez**
- Association between nymphal engorgement weight and sex of adult *Amblyomma americanum*, *Amblyomma maculatum*, *Dermacentor variabilis*, and *Rhipicephalus sanguineus*—**Dr. Yoko Nagamori**
- Ectoparasites of free-roaming domestic cats (*Felis catus*) presented to a spay-neuter clinic in Oklahoma—**Dr. Jennifer Thomas**
- Evaluation of fecal samples from dogs with naturally acquired gastrointestinal nematodes for coproantigen of *Trichuris vulpis*, *Toxocara canis*, and *Ancylostoma caninum*—**Dr. Chris Adolph** (2013 NCVP Resident graduate).

NCVP Board Members:

- Factor selection for utilization in maps of four vector-borne diseases—**Dr. Dwight Bowman**
- Protection of dogs against canine heartworm infection 28 days after 4 monthly treatments with Advantage Multi® for dogs—**Dr. Dwight Bowman**
- Administration of 10% imidacloprid-1% moxidectin protects cats from subsequent, repeated infection with *Dirofilaria immitis*—**Dr. Susan Little**

(continued on the following page...)



If you would like a pre-loaded custom NCVP USB flash drive or any parasite temporary tattoos contact us at ncvp@okstate.edu



Above: Edible promotional items available on the NCVP table at AAVP 2014.

NCVP at AAVP Continued...

(NCVP member research presentations at AAVP 2014 continued from page 3...)

- Prevalence of *Dirofilaria immitis* antigen in feline samples after heat treatment—**Dr. Susan Little**
- False negative antigen tests in dogs infected with heartworm and placed on macrocyclic lactone preventives—**Dr. Susan Little**
- Tick-borne infections in the southern United States – changing patterns (President's Symposium Keynote Talk)—**Dr. Susan Little**
- Prevalence of internal parasites in shelter dogs and cats based on centrifugal fecal flotation—**Dr. Byron Blagburn**
- Comparative efficacy of four commercially available heartworm preventive products against the JYD-34 laboratory strain of *Dirofilaria immitis*—**Dr. Byron Blagburn**
- Worm burdens of *Haemonchus contortus* in alpacas and sheep following experimental infection—**Dr. Anne Zajac**



In photo, from left to right: Dr. Dwight Bowman (moderator), Dr. Jean Tsao, and Dr. Susan Little discuss a question from the audience during the President's Symposium at AAVP 2014 entitled "Emerging Issues—Ticks and Tick-Borne Diseases." Dr. Little discussed changing patterns of tick-borne infections in the southern United States (see above), and was followed by Dr. Tsao (Michigan State University), who explained Lyme disease regional patterns in North America. It was an extremely informative and powerful session, and the audience had excellent comments and questions. Thank you, Drs. Little and Tsao for presenting!

NCVP Case-Based Clicker Session Again a Success at AAVP



Dr. Andrew Peregrine presents a case to the audience during the AAVP-NCVP case-based clicker session.

The NCVP again held a case-based, interactive (clicker response) clinical parasitology session at AAVP this year. Ten cases were compiled by Drs. Susan Little and Mason Reichard (OSU), complete with case histories, pertinent images, and follow-up questions regarding case management. Susan and Mason were available to respond to questions from the audience about featured parasites or expound on why certain answers were correct or incorrect. It served as a great review for graduate students who intend to become boarded in Veterinary Parasitology, as well as veterinarians who do not often see cases of the parasites presented. The moderator, or rather, referee, for the event was the 2014 AAVP President-elect himself, Dr. Andrew Peregrine. The session was very positive, informative, and entertaining. Thank you, Andrew, for doing such a fantastic job at

keeping the session lively, well-paced, and enjoyable! And many thanks to all audience members who participated in the session to make it such a wild success!



The audience listens intently to a presented case and is polled for answers using clickers.

The Amazing Residents of the NCVP



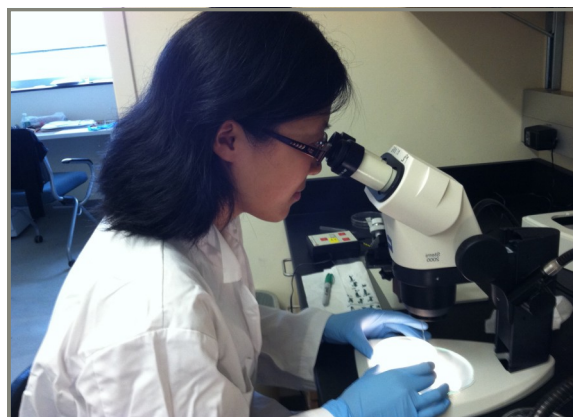
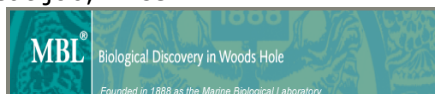
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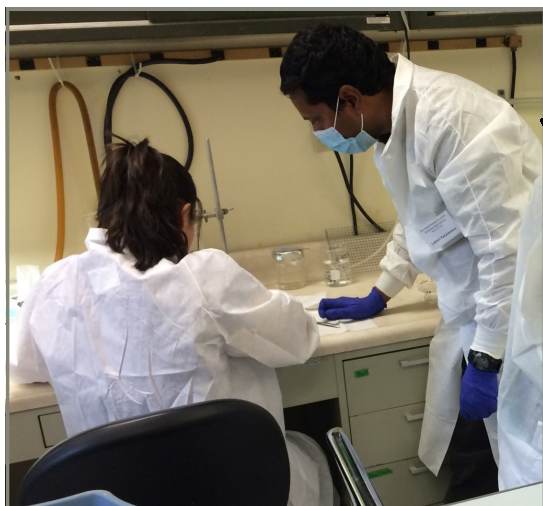
Current NCVP Residents with their individual awards received at AAEP 2014. From left to right: Dr. Jessica Rodriguez (Texas A&M University, Merial Resident), Dr. Alice Lee (Cornell University, Novartis Resident), Dr. Yoko Nagamori (Oklahoma State University, NCVP Resident), and Dr. Lindsay Starkey (Oklahoma State University, Bayer Resident).

Read what our residents have been up to recently in the article below...

Alice recently completed intensive parasitology training in Woods Hole, Mass., during *Biology of Parasitism: Modern Approaches*, a program directed by Dr. Kirk Deitsch, Weill Cornell Medical College, and Dr. Gary Ward, University of Vermont. The highly esteemed, world-renowned training course focuses on molecular parasite function and host/parasite interactions. Great job, Alice!



Alice injects frog eggs with RNA during parasitology training in Woods Hole, Mass.

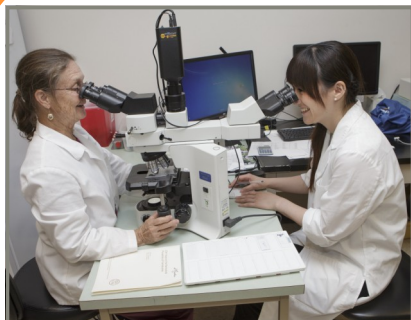


Jessica perfuses a mouse during the schistosome lifecycle workshop in Maryland.



Jessica recently completed two human schistosome training courses in Rockville, MD in order to gain better understanding of canine schistosomes, the focus of her dissertational research. The first workshop examined small interfering RNA (siRNA) in functional genomic work with *Schistosoma mansoni* stages, and the second provided training on life cycle maintenance of *Schistosoma mansoni*, *S. japonicum*, and *S. haematobium*. **Photomicrograph:** egg of the canine schistosome *Heterobilharzia americana*.



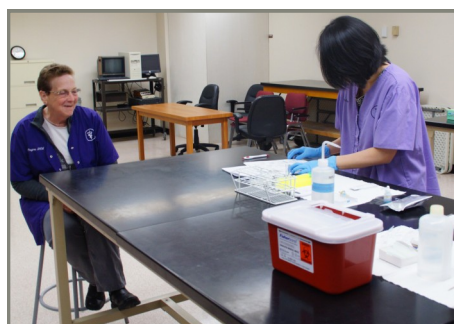


Yoko (right) and Dr. Johnson (left) examine a parasite specimen with a dual-headed light microscope.

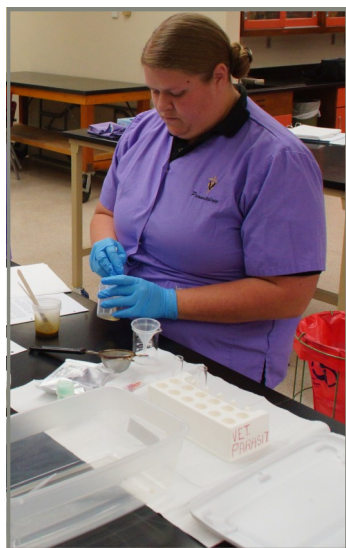
Yoko's diagnostic skills were impressive, as was her zeal for parasitology, which inspired her to independently obtain and identify parasites in various wildlife she collected herself or through the Avian, Exotic, and Zoo Department at Oklahoma State University. Yoko thoroughly enjoyed her internship in veterinary diagnostic parasitology with Dr. Johnson and Becky, made evident by her enthusiasm and eagerness to learn. The NCVP is thrilled to have Yoko as a resident!

Each of the NCVP residents, **Alice, Lindsay, Jessica, and Yoko**, completed *Wildcat Parasitology* (WCP) in 2014. The program, taught by **Drs. Michael Dryden and Patricia Payne**, Kansas

State University, and sponsored by several veterinary pharmaceutical companies, is designed to expose attendees to a variety of parasitology concepts and techniques through lecture materials, directed field and laboratory work, and independent research. Many thanks to Mike, Pat, and NCVP sponsors for providing such an extraordinary parasitology training opportunity to NCVP residents, and great job residents on completing it!



Alice (right) performs a heartworm diagnostic test as Dr. Patricia Payne (left) watches during WCP.



Lindsay performs a fecal flotation as part of the WCP fecal lab.



Jessica (second from the left) and her partner Ashley McGrew (post-doc at Colorado State University) check for ticks on a drag during WCP. Dr. Sam Reichman, a private practitioner from Georgia, is on the left.



Jessica (front, middle) and Yoko (front, right) retreat from a successful tick drag with others in the group including American Heartworm Society President Dr. Stephen Jones (front, left) and Dr. Mike Dryden, who is in the back with a camera. You guys look like you're draggin' (get it?)!

2014 Request for Parasitology Research Proposals

The NCVP is again offering funding for up to one year for parasitology research projects; the request for research proposals (RFP) was distributed to AAVP members on July 1, 2014. This year, investigators may request up to \$15,000. Funding is made possible through our founding sponsors, Bayer Animal Health, Merial Limited, and Novartis Animal Health, and new sponsors Elanco, Merck Animal Health, and Zoetis which partnered with the NCVP in 2014. Excitingly, this year the American Heartworm Society will provide support for the RFP initiative, which means available funds can accommodate 6 to 8 one-year awards of \$10,000 to \$15,000 each, with two of the total number of projects funded focused on *Dirofilaria immitis*. The RFP is open to all members of the AAVP at AVMA accredited schools in the Americas. Awarded funds will be disbursed in November 2014. This is an excellent opportunity to obtain research funding for projects that are less likely to be funded through other organizations. The NCVP encourages your submission!

Parasites for the People



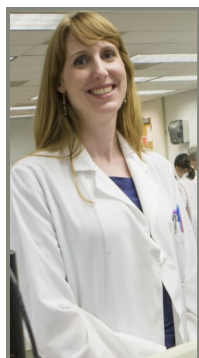
CENTER FOR VETERINARY HEALTH SCIENCES
Healthy Animals — Healthy People

Merial Resident Jessica Rodriguez Talks Canine Heartworm on the Local News!



Dr. Jessica Rodriguez recently appeared on local morning news during the Pet Talk segment (KBTX, College Station, Texas) to raise public awareness about canine heartworm transmission, symptoms, testing, treatment, and year-round prevention. Jessica is a natural on camera, although she claims her dog Pixie stole the show! Keep up the great work, Jessica! Click [here](#) to see Jessica on the NEWS! Also, Jessica recently wrote an article about water-borne parasites in dogs for the Texas A&M University newspaper *tamu times*, an excerpt of which was featured in *Bio News Texas*. Click [here](#) to read the article. **The photograph of Jessica performing a fecal sedimentation on the left was featured in *tamu times*.**

NCVP Members Present during OSU's Annual Summer Seminar



Drs. Kelly Allen, Eileen Johnson, and Jennifer Thomas (pictured from left to right) participated in Oklahoma State University's College of Veterinary Medicine Annual Summer Seminar on June 6, 2014. Dr. Allen presented the latest findings in heartworm research, including canine and feline heartworm antigen negative test reversal through sample heating, and experimental evidence for heartworm resistance to macrocyclic lactones. Dr. Johnson spoke about different fecal egg count test methods, uses, limitations, and interpretations. And Dr. Thomas presented on common horse ectoparasites and methods for their control. Thanks for helping to educate practicing veterinarians and veterinary technicians on these important research topics!

And They're Off! NCVP Introduces New Sport to the World — Tick Racing!



Above: Dr. Starkey, who always quests for excellence, stands behind the GPU life-size tick board for a picture.

Drs. Kelly Allen and **Lindsay Starkey** recently instructed the Parasitology lab at Oklahoma State University's annual Grandparent University (GPU), an event where OSU alumni are invited to escort their grandchildren to various classes on campus. Parasitology lab is highly sought after every year. During Parasitology at GPU, children (ranging in age from 5 to 12 years) and grandparents learn about and view specimens of various parasites including heartworms, roundworms, tapeworms, fleas, and ticks. A particularly popular specimen every year is the nearly 7-foot long, intact *Moniezia* graciously provided by Dr. Thomas Yazwinski at the University of Arkansas. Also, children (and grandparents) enjoy posing behind a life-sized *Amblyomma americanum* picture board to have their photos taken as lone star ticks. Live ticks in magnifying viewing boxes are also a source of entertainment.



Pictured from left to right, tick racers "Teal Tornado," "Outrageous Orange," and "Lime Laser" on the sideline waiting to race during GPU.

And this year, a new sport was introduced to the world – **TICK RACING!** In preparation for racing, live colony-reared ticks were painted with different nail polish colors (fortunately, Dr. Starkey has an impressive selection) while adhered to double-sided tape, allowed to dry, and then placed in a 4 ml cryovial before waiting to race. The race track was a single empty circle printed on a piece of white paper, which was surrounded by double-sided tape to cordon off an arena. Kids first chose their racer color (Lime Laser, Lucky Lilac, Outrageous Orange, Racer Red, and Teal Tornado, to name a few). Ticks were flicked out of the cryovial into the center of the circle, and the first tick to make it across the circle line placed first. While caught up in the excitement of the race, kids and grandparents alike would cheer on their chosen racers, with "Go! Go! Go!" being a popular chant. It was a hit in 2014, and the start of a new GPU Parasitology tradition at Oklahoma State University!



GPU Parasitology students cheer on their chosen tick to cross the finish line first. Go tick racers, go!



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NCVP Image Database Expanding

The NCVP is very excited about the new images available in the NCVP image database. Dr. Ellis Greiner, Professor Emeritus, Department of Infectious Diseases and Pathology, University of Florida, graciously shared with the NCVP his remarkable collection of parasite photographs he has taken and compiled over the years. The images are watermarked with both the NCVP and University of Florida (UF) logos. Third year veterinary student at OSU, Darcy Messerly, took on the task this summer of adding over 200 of Dr. Greiner's images to the database, which currently houses over 400 images, but there are hundreds more to post! So please, be sure to check out the extraordinary parasite images available at www.ncvetp.org!



Anterior end of an acanthocephalan



***Trypanosoma theileria* trypomastigote**



***Haematobia irritans* adult**



***Dermatobia hominis* larva**

Above: Photographs shared with the NCVP by Dr. Ellis Greiner, which are now available in the NCVP image database.

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 Center for Veterinary Health Sciences 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 www.ncvetp.org.



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Selected Publications from the NCVP

Our residents, faculty, and staff have had a busy year. Below is an abridged list of just a few of the publications over the last year (names of board members and residents are bolded). To request the full list or individual reprints, please email ncvp@okstate.edu. And just let us know if you have suggestions for future CE articles, review papers, or topics you think would be of interest to others in the field.

2014 TO DATE...

- Rust MK, Vetter R, Denholm I, **Blagburn B**, Williamson MS, Kopp S, Coleman G, **Hostetler J**, Davis W, Mencke N, Rees R, Foit S, Tetzner K. J Med Entomol. 2014. Susceptibility of cat fleas (Siphonaptera: Pulicidae) to fipronil and imidacloprid using adult and larval bioassays. 51:638-43.
- Elsemore DA, Geng J, Flynn L, Cruthers L, Lucio-Forster A, **Bowman DD**. 2014. Enzyme-linked immunosorbent assay for coproantigen detection of *Trichuris vulpis* in dogs. J Vet Diagn Invest. 26:404-411.
- Coles TB, **Dryden MW**. 2014. Insecticide/acaricide resistance in fleas and ticks infesting dogs and cats. Parasit Vectors. 7:8.
- Wood J, **Johnson EM**, **Allen KE**, Campbell GA, Rezabek G, Bradway DS, Pittman LL, **Little SE**, Panciera RJ. 2014. Merogonic stages of *Theileria cervi* in mule deer. J Vet Diagn Invest. 25: 662-5.
- Carmichael RC, Duell JR, Holbrook TC, Herrin BH, Leutenegger CM, O'Connor TP, **Little SE**. 2014. Antibodies reactive to *Ehrlichia* spp. are common in horses in the southern United States. VBZD. 14:552-6.
- Little SE**, Munzing C, Heise SR, **Allen KE**, **Starkey LA**, **Johnson EM**, Meinke JH, **Reichard MV**. 2014. Pre-treatment with heat facilitates detection of antigen of *Dirofilaria immitis* in canine samples. Vet Parasitol. 203:250-2.
- Mowlavi G, Farzod F, Kheirkhah A, Mobedi I, **Bowman DD**, Naddaf SR. 2014. Human ocular onchocerciasis caused by *Onchocerca lupi* (Sirurida, Onchocercidae) in Iran. J Helminthol. 88:250-5.
- Stillman BA, Monn M, Liu J, Thatcher B, Foster P, Andrews B, **Little S**, Eberts M, Breitschwerdt E, Beall M, Chandrashekar R. 2014. Performance of new commercially available in-clinic ELISA for the detection of antibodies to *Ehrlichia ewingii* (granulocytic ehrlichiosis) and *Anaplasma platys* (thrombocytopenic anaplasmosis) in dogs. JAVMA. 245:80-6.
- Lucio-Forster A, Eberhard ML, Cama VA, Jenks MH, Jones C, Sanders SY, Pongratz JP, **Bowman DD**. 2014. First report of *Dracunculus insignis* in two naturally infected cats from the northeastern USA. J Feline Med Surg. 16:194-7.
- Rodriguez JY**, Lewis BC, Snowden KF. Distribution and characterization of *Heterobilharzia americana* in dogs in Texas. Vet Parasitol. 203:35-42.
- Lucas AS, Swecker WS Jr., Lindsay DS, Scaglia G, Neel JP, Elvinger FC, **Zajac AM**. 2014. A study of the level and dynamics of *Eimeria* populations in naturally infected, grazing beef cattle at various stages of production in the Mid-Atlantic USA. Vet Parasitol. 202:201-206.
- Knaus M, Baker CF, **Reinemeyer CR**, Chester ST, Rosentel J, Rehbein S. 2014. Efficacy of a novel topical combination of fipronil, (S)-methoprene, eprinomectin and praziquantel against adult and larval stages of *Toxocara cati* in cats. Vet Parasitol. 202:34-9.
- Little SE**, Beall MJ, **Bowman DD**, Chandrashekar R, Stamaris J. 2014. Canine infection with *Dirofilaria immitis*, *Borrelia burgdorferi*, *Anaplasma* spp., and *Ehrlichia* spp. in the United States, 2010-2012. Parasit Vectors. 7:257.
- Wang D, **Bowman DD**, Brown HE, Harrington LC, Kaufman PE, McKay T, Nelson CT, Sharp JL, Lund R. 2014. Factors influencing US canine heartworm (*Dirofilaria immitis*) prevalence. Parasit Vectors. 7:264.
- Duell JR, Carmichael R, Herrin BH, Holbrook TC, Talley J, **Little SE**. 2014. Prevalence and species of ticks on horses in central Oklahoma. J Med Entomol. 50:1330-3.
- Genchi C, **Bowman D**, **Drake J**. 2014. Canine heartworm disease in Western Europe: survey of veterinary awareness and perceptions. Parasit Vectors. 7:206.
- Little SE**, Raymond MR, **Thomas JE**, Gruntmeir J, **Hostetler JA**, Meinke JH, **Blagburn BL**. 2014. Heat treatment prior to testing allows detection of antigen of *Dirofilaria immitis* in feline serum. Parasites and Vectors. 7:1.
- McArthur MJ, **Reinemeyer CR**. 2014. Herding the US cattle industry toward a paradigm shift in parasite control. Vet Parasitol. 204:34-43.
- Di Cesare A, Braun G, Di Giulio, Paoletti, Aquilino V, Bartollini R, La Torre F, Meloni S, **Drake J**, Pandoifi F, Avollo S, Traversa D. 2014. Field clinical study evaluating the efficacy and safety of an oral formulation containing milbemycin oxime/praziquantel in the chemoprevention of the zoonotic canine infection by *Dirofilaria repens*. Parasit Vectors. 7:347.
- Nielsen MK, **Reinemeyer CR**. 2014. Anthelmintic resistance in equine parasites—current evidence and knowledge gaps. Vet Parasitol. 204:55-63.
- Driver JH, Ross JH, **Guerino F**, Wizesinski C. 2014. Measurement of the temporal transferability of indoxocarb to cotton gloves from spot-on treated dogs. J Toxicol Environ Health A. 77:696-704.
- Baker CF, Tielemans E, Pollmeier MG, McCall JW, McCall SD, Irwin J, Chester ST, **Carithers DS**, Rosentel JK. 2014. Efficacy of a single dose of a novel topical combination product containing eprinomectin to prevent heartworm infection in cats. Vet Parasitol. 2014. 202:49-53.
- Andersen UV, **Reinemeyer CR**, Toft N, Olsen SN, Jacobsen S, Nielsen MK. Physiologic and systemic acute phase inflammatory responses in young horses repeatedly infected with cyathostomins and *Strongylus vulgaris*. Vet Parasitol. 201:67-74.
- Prullage JB, Knaus M, **Bowman DD**, Chester ST, Visser M, Rehbein S, Rosentel, J. 2014. Efficacy of a novel topical combination of fipronil, (S)-methoprene, eprinomectin and praziquantel against induced infections of *Ancylostoma* spp. nematodes of cats. Vet Parasitol. 202:30-33.

AND A FEW MORE TO WATCH FOR...

- Lee AC**, Hostetler JA, **Bowman DD**. 2014. Assessing the speed of kill of hookworms, *Ancylostoma caninum*, by Advantage Multi® for dogs using endoscopic methods. 2014. Vet Parasitol. In press.
- Adolph CA**, Downie K, Snider T, **Little SE**. 2014. High prevalence of covert infection with gastrointestinal helminths in cats. JAHA. In press.
- Bowman DD**, **Reinemeyer CR**, Wiseman S, **Snyder DE**. Efficacy of milbemycin oxime in combination with spinosad in the treatment of larval and immature adult stages of *Ancylostoma caninum* and *Toxocara canis* in experimentally infected dogs. Vet Parasitol. 2014. In press.
- De Wolf BM, **Zajac AM**, Hoffer KA, Sartini BL, Bodridge S, LaRoith T, Petersen KH. 2014. The effect of vitamin E supplementation on an experimental Haemonchus contortus infection in lambs. Vet Parasitol. In press.
- Velasquez L, **Blagburn BL**, Duncan-Decoq R, **Johnson EM**, **Allen KE**, Meinke JH, Gruntmeir J, **Little SE**. 2014. Increased prevalence of *Dirofilaria immitis* antigen in canine samples after heat treatment. Vet Parasitol. In press.
- Starkey LA**, Barrett AW, Chandrashekar R, Stillman BA, Tyrrell P, Thatcher B, Beall MJ, Gruntmeir JM, Meinke JH, **Little SE**. 2014. Development of antibodies to and PCR detection of *Ehrlichia* spp. in dogs following natural tick exposure. Vet Microbiol. In press.
- Dubey JP, Casey SJ, **Zajac AM**, Wildeus SA, Lindsay DS, Verma SK, Oliveira S, Kwok OC, Su C. 2014. Isolation and genetic characterization of *Toxoplasma gondii* from alpaca (*Vicugna pacos*) and sheep (*Ovis aries*). Trop Anim Health Prod. In press.
- Reinemeyer CR**, Prado JC, Andersen UV, Nielsen MK, Schrick B, Kennedy T. 2014. Effects of daily pyrantel tartrate on strongylid population dynamics and performance parameters of young horses repeatedly infected with cyathostomins and *Strongylus vulgaris*. Vet Parasitol. In press.