OKLAHOMA STATE UNIVERSITY COLLEGE OF VETERINARY MEDICINE – OKLAHOMA ANIMAL DISEASE DIAGNOSTIC LABORATORY Fall 2019 · Volume 23 Fall 2019 · Volume 23

In this Issue

Parasites in Dogs1
Free testing for Equine
Neurologic Diseases1
OADDL Participates in the USDA
(ASF) Preparedness Exercise 2
McElliot joins OADDL 3
BRD Wet Lab 3
Moré joins OADDL4
Letter from Interim Director 4
Getting to Know Us4
Request for Feedback5

Faculty

Interim Director: Dr. Jerry Ritchey

Assistant Director/Quality Manager: Emily J. Cooper

> *Microbiology/Molecular Diagnostics:* Dr. Akhilesh Ramachandran

> > *Parasitology:* Dr. Yoko Nagamori

Pathology: Dr. Valerie McElliott Dr. Craig Miller Dr. Sunil Moré Dr. Grant Rezabek Dr. Jerry Ritchey Dr. Tim Snider

Serology: Dr. Grant Rezabek

Graphic Design/Layout: Clarissa Walton

Parasites in Dogs



In the Summer 2019 issue of OADDL eNews we looked at the prevalence and trend of parasitic infection from 7,408 client-owned dogs over the past 12 years (2007-2018). This data identified five parasites commonly observed and their prevalence over the 12-year period.

In this issue, we are looking at the parasite distribution in relation to sex *continued on page 2*

Free testing for Equine Neurologic Diseases

The Oklahoma Department of Agriculture Food & Forestry (ODAFF) is subsidizing diagnostic testing through OADDL for Oklahoma horses with clinical signs of central nervous system disease. This funding was made available through a USDA grant obtained by ODAFF to incentivize Equine Herpes Virus (EHV) surveillance and is available until April 2020.

All of the following samples MUST be submitted to receive free testing:

- 1. Whole blood in EDTA (PTT) EHV-1 gB PCR testing
- 2. Deep nasal swabs (in RTT with 0.5ml saline) EHV-1 gB PCR testing NOTE: Plastic shaft cotton swabs are recommended
- 3. Serum or clotted blood (RTT) WNV/EEE ELISA & EPM IFAT testing

Please indicate "ODAFF CNS Subsidy" on the OADDL submittal form.

Contact: Dr. Akhilesh Ramachandran (OADDL) Dr. Michael Herrin (ODAFF) 405-744-6623 405-522-6142



COLLEGE OF VETERINARY MEDICINE

Parasites in Dogs (continued)

Fall 2019 • Vol. 23

and age regardless of submission year. Of the 7,408 submissions, 3,418 were from males, 3,573 were from females and 418 were from unknown sex dogs. There was no statistical significance observed between male and female dog populations. (see chart/ table).

In contrast, age had a significant influence on the prevalence

60

<6mos

6-12mos

valence (%) 30 of parasitic infection. The younger the dogs, the higher the prevalence of parasitic infection. (see chart/table).

Comparison of prevalence by different age groups

— Dr. Y. Nagamori

Age	No. total cases	No. of positive cases	Prevalence % (95% CI)	
<6 mos	1,700	585	34.4 (32.2 - 36.7)	
6-12 mos	681	185	27.2 (23.9 - 30.7)	
1-5 yrs	2,337	364	15.6 (14.2 - 17.1)	
>5 yrs	2,344	212	9.0 (8.0 − 10.3)	
Unknown age	347	167	48.1 (42.8 – 53.5)	

Sex	No. total cases	No. of positive cases	Prevalence % (95% Cl)
Male	3,418	670	19.6 (18.3 - 21.0)
Female	3,573	667	18.7 (17.4 − 20.0)
Unknown sex	418	176	42.1 (37.4 - 46.9)

1-5vrs

>5vrs

Unknown



OADDL Participates in the USDA African Swine Fever (ASF) Preparedness Exercise

Last month, Oklahoma and 13 other top swine producing states participated in the fourth and final ASF exercise conducted by the USDA. The planning exercises which began last winter laid the ground work for the last series of functional exercises and drills.

This simulation exercise walked the Oklahoma Animal Disease Diagnostic Laboratory (OADDL) and other state agencies through various scenarios to help evaluate current ASF preparedness plans and identify gaps.

The African swine fever virus (ASFV) was first discovered in Kenya in 1921 and remained restricted to Africa until 1957. Currently, the virus has been reported in wild and domestic pigs in regions of Asia, Europe and Africa but has never been detected in the United States. According to Dr. Rod Hall, Oklahoma State Veterinarian, "ASF is a highly contagious and deadly viral disease affecting both domestic

and wild pigs of all ages. However, it is not a threat to human health, is not a food safety issue and cannot be transmitted from pigs to humans."

The OADDL is one of 37 labs in the U.S. approved by the National Animal Health Network (NAHLN) to perform diagnostic testing for ASF in a Foreign Animal Disease Investigation (FADI) situation.

– E. Cooper





Page 2

Comparison of prevalence by different sex groups

McElliot Joins OADDL as Assistant Professor of Anatomic Pathology and Residency Training Coordinator

Valerie McElliott, DVM, PhD, DACVP, is an assistant professor of anatomic pathology and the residency training coordinator in the veterinary pathobiology department.

Originally from Duncanville, Texas, she earned her DVM degree from Tuskegee University College of Veterinary Medicine. After completing a one-year internship in anatomic pathology at Tuskegee University, she completed an anatomic pathology residency program at the University of California, Davis. She earned her PhD from the University of Georgia College of Veterinary Medicine.

Valerie has traveled to France, South Korea, Guam and Mexico. In her spare time she enjoys camping, listening to music, exercising, trying different cuisines and spending quality time with family and friends.



Bovine Respiratory Disease Wet Lab



Forty veterinary students recently attended a necropsy wet lab at OADDL discussing bovine respiratory disease (BRD). The students gained hands-on experience with bovine field necropsy and identifying lesions associated with BRD. Dr. Douglas Hilbig, a Zoetis beef technical services veterinarian, demonstrated the necropsy. Dr. Grant Rezabek provided students with information on lung lesions and proper samples to collect. The student chapters of the ACVP and PAMS partnered with Zoetis student representatives to organize the event.

 Hannah Felder DVM Candidate, Class of 2021, ACVP Wet Lab Coordinator



Nov. 14-15

Wes Watkins Center for International Trade Development 810 W. Hall of Fame Stillwater, OK 74078





Fall 2019 • Vol. 23

OADDL E-NEWS

Letter from the Interim Director

There is nothing like Homecoming in Stillwater. It was great to see all of the alumni and fans return to town and a special thanks to those of you that stopped by to say "hello".

As many of you may already know, OADDL Director Dr. Keith Bailey has left the Laboratory for a position at the University of Illinois. We appreciate Keith's years of service and wish him all the best at his new position. He has positioned OADDL for the next phase of growth where we hope to increase capacity and services. For now, I just want to assure everyone that you can expect the same high level of service during this transition. I am currently serving as your Interim Director. I served in a similar capacity in 2012-2013, so I am familiar with OADDL operations. More importantly, we have Ms. Emily Cooper, OADDL Assistant Director, who is our most valuable player in keeping things running smoothly and efficiently.

Dr. Carlos Risco, Dean of the College of Veterinary Medicine, is committed to replacing Keith with an exceptional Director candidate. Dean

Moré Joins OADDL as Assistant Professor of Anatomic Pathology

Sunil Moré is an assistant professor of anatomic pathology in the veterinary pathobiology department.

Originally from Nashik, India, he earned his BVSc and AH degree in veterinary medicine and his master's degree in veterinary sciences from the Nagpur Veterinary College and his PhD in veterinary biomedical sciences from OSU. Dr. Moré is a Diplomate of the American College of Veterinary Pathologists. His research interests include respiratory diseases, influenza virus and host factors, and animal models development.

In his spare time, he enjoys watching and playing different sports.

Getting to Know Us

Cayla Clouse is originally from Edmond, Oklahoma and has a background in dairy cattle as well as show pigs. She received her B.S. at Oklahoma State University in Animal Science in 2018. She joined the Receiving and Necropsy departments in December of 2018. Cayla enjoys fishing, camping, riding ATV's, anything that has to do with livestock and spending time with friends and family. She has a 4 year old chocolate lab named Murphy that keeps her busy constantly playing.



Risco has asked me to Chair the Search Committee that includes Dr. Rod Hall (Oklahoma state veterinarian), Dr. Mike Tripp and Dr. Steve Hart (representatives from the OADDL Board of Advisors). Dr. David Lalman (OSU Animal Science), Dr. John Gilliam (Food Animal Production), Ms. Emily Cooper (OADDL Assistant Director) and Dr. Jeff Studer (Director of the University's Teaching Hospital). Recruitment is underway and we already have exceptional candidates. Our hope is to have the person onboard before the holidays. If you would like to nominate someone to apply, please direct them here: https://aavld-jobs.careerwebsite.com/ job/director-oklahoma-animal-disease-diagnostic-laboratory/50761691/ Lastly, per recent action by the Board of Regents, we are no longer the Center for Veterinary Health Sciences (CVHS), but have taken back our previous identifier as the College of Veterinary Medicine. This was a move initiated by Dean Risco to help with University and College branding and marketing and to make us more visible on online media platforms.

Have a great and safe Fall. – Dr. Jerry Ritchey

Ideas/Suggestions for Future Content

We want to hear from you. Send your ideas and suggestions to <u>oaddl@okstate.edu</u>.

Contact Us

Oklahoma Animal Disease Diagnostic Laboratory Ph: 405-744-6623 Fax: 405-744-8612 vetmed.okstate.edu/oaddl

f Follow us on Facebook



Oklahoma State University, in compliance with the Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246 as amended, Title IX of the Education Amendments of 1972, Americans with Disabilities Act of 1990, and other federal laws and regulations, does not discriminate on the basis of race, color, national origin, sex, age, religion, disability or status as a veteran in any of its policies, practices or procedures. This includes but is not limited to admissions, employment, financial aid and educational services. Title IX of the Education Amendments and Oklahoma State University policy prohibit discrimination in the provision or services or benefits offered by the university based on gender. Any person (student, faculty or staff) who believes that discriminatory practices have been engaged in based on gender may discuss his or her concerns and file informal or formal complaints of possible violations of Title IX with OSU's Title IX coordinator: the Director of Affirmative Action, 408 Whitehurst, Oklahoma State University, Stillwater, OK, 74078, (405) 744-5371 or (405) 744-5576 (fax). #5565

