

C.L. DAVIS/S.W. THOMPSON DVM FOUNDATION

A TAX-EXEMPT, DONATIVE, PUBLICLY-SUPPORTED CHARITY FOR THE ADVANCEMENT OF VETERINARY AND COMPARATIVE PATHOLOGY

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INSIDE THIS ISSUE

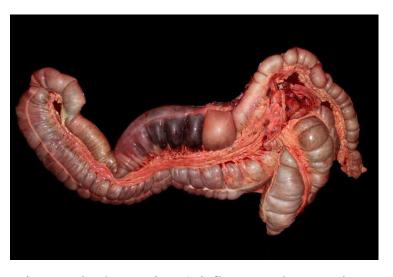
Francisco Uzal, DVM, PhD

- 1. Day-Seminar Equine Diseases Reviews
- 4. June Virtual Seminars
- 5. Day-Seminar Aquatic and Zoo Animals
- 6. Review Seminar Mast Cell Tumors
 7. US Descriptive VetPath Course
- 8. Day-Seminar ClinPath
- 9. Review Freshwater Fish Pathology
- 10. Pathology of Laboratory Animals
- 11. Ruminant Symposium
- 12. Uraguayan Pathology Seminar
- 13. Southcentral Division Meeting 14. Pathology of Wildlife Diseases
- 15. ACVP Pre-Conference Workshop
- 16. Review Stories From Zoos and Aquaria
- 17. Latin Comparative Pathology Group
- 18. Diagnostic Exercise
- 19. Miscellaneous
- 20. Calendar for Upcoming Events

Foundation Kicks Off Seminar Series in a Big Way

On 12 May, the Foundation, answering the call of the cancellation of meetings from almost every organization, heeded the call of its members for CEUs by holding its first ever VIRTUAL Day-Seminar, a full day of lectures on equine diseases. The Foundation has held "Day-Seminars" (a unique term but one well known to many Foundation members) since the 1990's in the NE Division, and recently inaugurated a series of free Day-Seminars in Europe and South America. A Day-Seminar is just what it sounds like – a full day of lectures, and in the US, a full 8 hours of accredited CE. In order to accommodate the time zones of as many attendees as possible, this Day-Seminar, and future Day-Seminars in the series, begin at 7AM Pacific Standard Time in the US.

The day began with a 2-hour lecture on eauine neuropathology Professor by Fabio del Piero of Louisiana State University. Viral discussion covered rabies. West Nile Virus. the alphaviruses, Japanese



encephalitis, Borna virus, equine herpesvirus-1, influenza and coronavirus, and others. A discussion of bacterial infections followed, including Streptococcus equi, Rhodococcus sp., and Salmonella. The entities of brain abscesses and embolic bacterial encephalitis were discussed along the way. as well as the emerging disease of neuroborreliosis. Important protozoal, fungal, and nematode infections of the CNS were not left out. The lecturer closed his review of diseases of the cranial vault with congenital diseases and a discussion of diseases without well-defined etiologies. A beautiful review of compressive lesions in the peripheral nerves followed, and the lecture concluded with diseases of peripheral nerves.

continued on Page 2...

Following the first well-deserved break, Dr. Sue Stover, Distinguished Professor of Surgery at UC Davis, and a foremost authority on equine injuries, gave an excellent review of skeletal diseases in racehorses. The talk covered the following (in order) - the nature of injuries in athletes, responses to injury, adaptation via modeling and remodeling, stress fractures, subchondral stress remodeling, common skeletal sites for injury, and the necropsy examination. In easy to understand terms and with great diagrams, she explained how these injuries occur as a result of overuse, and demonstrate the very typical and reproducible lesions that they create as a result repetitive loading and inadequate time for repair. The lecture had some excellent suggestions for pathologists not only in terms of identifying and documenting these common injuries, but also for preparing useful reports for clinical veterinarians.

After lunch, Dr. Paco Uzal gave an outstanding lecture on diseases of the alimentary tract in the horse. The lecture started with a review of clostridial diseases (which may account for up to 50% of infectious disease of the horse gut), and covered other bacterial agents such as Salmonella, Rhodococcus, and less common bacterial agents. Next up were parasites, first nematodes (strongyles in a million-dollar horse - crazy!) and protozoans. Then viral enteric diseases were covered, such as rotavirus and coronavirus. Non-pathogenic diseases included developmental anomalies, drug toxicity, and toxic plants, with displacement and neoplasms of the equine gut concluding the lecture, which, like all of the others, was followed by as many questions from the audience as time would allow.

Concluding the seminar was Dr. Leandro Teixeira of the Comparative Ocular Pathology Laboratory of Wisconsin who gave an outstanding wide-ranging lecture on diseases of the eye in the horse – it would appear that it is NOT all recurrent uveitis! This was a unique lecture to all concerned, who could not recall a full lecture on equine ophthalmic pathology, much less such a beautifully illustrated one. Dr. Teixeira gave detailed gross and histologic descriptions on all of the diseases of the equine globe, beginning with developmental diseases. Diseases of the cornea (the most common in this species due to its large eyes and skittish nature) followed, with mycotic keratitis getting special attention. As expected, recurrent uveitis got its due, but a number of other less common ocular diseases, some first diagnosed by the experts at COPLOW, followed.

Additional virtual Day-Seminars are already planned for May 26 (Dermatopathology), June 9 (Pathology of Zoo Animals and Aquatic Animals), and June 23 (Clinical Pathology Review). We hope to see you all there!

Participant Review of Equine Disease Virtual Day Seminar, by Heather Herd, BVMS, DACVP

On May 12, 2020, the C. L. Davis – Thompson Foundation held their first ever virtual day seminar featuring Equine Diseases. The days' lectures were held via Zoom and included excellent quality presentations from Dr. Fabio Del Piero on Pathology of the Equine Nervous System, followed by Dr. Susan Stover on Musculoskeletal Injuries of Race Horses, then Dr. Paco Uzal with Pathology of the Equine Alimentary Tract, and last but certainly not least, Dr. Leandro Teixeira with Equine Ophthalmic Pathology. Despite the

many miles between attendees and presenters, the material was consistently engaging discussion that and followed talk. each stimulating. I was lucky enough to enjoy all the gross photos and photomicrographs on our 60-inch widescreen living room television,



providing a very cinematic experience for me and my family. Other attendees posted photos of them and their pets enjoying the lectures to the C. L. Davis – Thompson Foundation Facebook page, helping us all feel a bit more connected in this time of social distancing. If you missed it, jump on over to the C. L. Davis and S. W. Thompson Foundation YouTube channel and enjoy each of these lectures for free.







05 FRIDAY

Cognitive errors in veterinary diagnostic pathology: why we make mistakes and how to mitigate the risk

SPONSORED BY DTF



Dr. Paul Stromberg
The Ohio State University
Ohio

Tumors of the peripheral nervous system

SPONSORED BY DTF

12 FRIDAY



Dr. Kevin Woolard
UC Davis
California

19 FRIDAY

Pathology of camelids

SPONSORED BY DTF



Dr. Christiane Loehr Oregon State University Oregon

The pathology of selected diseases caused by toxic plants

SPONSORED BY LCPG

26 FRIDAY



Dr. Claudio Barros UFMS Brasil

The seminars are free and offered via Zoom and hosted by Davis Thompson Foundation CEO, Dr Bruce Williams or President Dr Francisco Uzal.

Registration is free but required (watch for your invitation to register in the coming weeks).

All seminars are at 9 am (PST), 10 am (MST), 11 am (CST), 12 pm (EST)

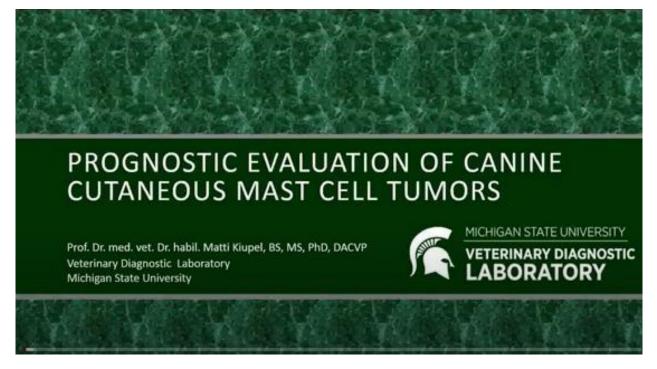


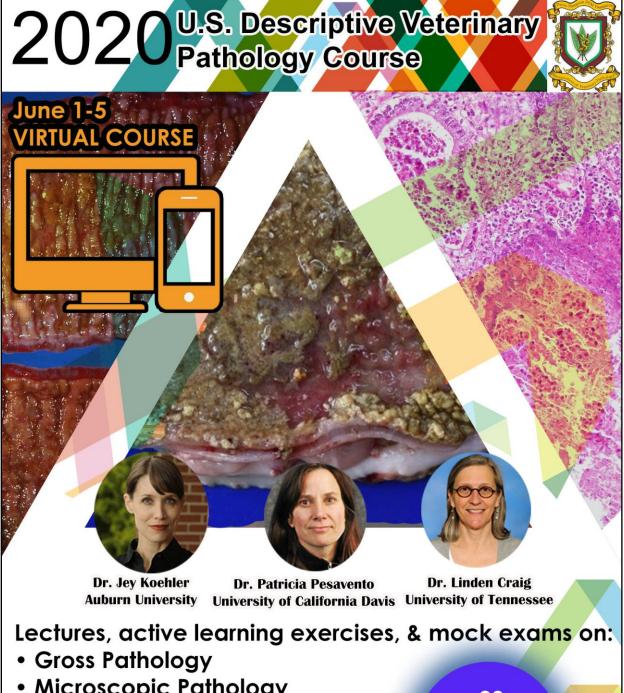
Participant Review of Prognostic Evaluation of Canine Cutaneous Mast Cell Tumors

by Mary Duncan, DVM, DACVP, St. Louis Zoological Park

Dr. Matti Kiupel (Veterinary Diagnostic Laboratory, Michigan State University) gave a virtual presentation entitled Prognostic Evaluation of Canine Cutaneous Mast Cell Tumors for the Foundation on April 24, 2020. He began with an outline of the expected case presentation for the entity that is responsible for 7-21% of canine cutaneous tumors. Often a cytologic sample is submitted initially and the improved granule staining with Wright's stain over Diff Quik was clearly demonstrated. Prognostic study problems were discussed: differentiation of metastatic over de novo tumor development, presence of nodal spread, length of survival following surgery relative to owner-client decision to euthanize, and, the elephant in the room, tumor grading.

Dr. Kiupel continued with a review of the different grading systems. He showed how results of a blind trial of 28 pathologists asked to review the same collection of cases using the Patnaik system had a lot of crossover between grades 1 and 2, while nuclear and cellular morphology differences, made grades 2 and 3 easier to distinguish. A single grading system was not optimal for prognostication, but by addition of further criteria, tiering the grading system, results were markedly improved. Additional criteria were numbers of mitotic figures, multinucleated cells, bizarre nuclei and karyomegaly. Examination of sample margins was further discussed, including "orange peel sections", and methodology for local lymph node assessment. Mitotic index versus mitotic count was reviewed and variable mitotic activity with location in a neoplasm. It was a stimulating hour, whether studying for Boards or just brushing out the mental cobwebs, and certainly a good distraction from COVID-19.





- Microscopic Pathology
- Gross-Micro Correlations
- Ultrastructural Pathology
- Immunohistochemistry

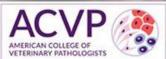
20 **RACE CE** credits!

Registration is now closed, as all seats are filled



Davis-Thompson Foundation Virtual Day-Seminars

Clinical pathology review Tuesday, 23 June



Registration fee: \$50



Or.Darren Wood University of Guelph 7-9 am



Or Kirstin Barnhart Envigo Global Services 9:30-11:30 am





Or Melinda Camus University of Georgia 12:30-2:30 pm

CBC Basics. The value of blood smear evaluation.



Or Julie Webb Cornell University 3-5 mm

Diagnostic cases (hemostasis and CBC)

- -This program has been submitted (but is not yet approved) for 8 hours of continuing education credit in jurisdictions which recognize RACE approval.
- -This seminar is preapproved by the ACVP Maintenance of Certification (MOC) Committee for 1 credit
- *: all times in PST

Click to register:

https://us02web.zoom.us/webinar/register/WN_4ls7lQa0RwuhiC6Evt-u9g

Participant Review "Freshwater Fish Pathology"

by Karelma Frontera-Acevedo

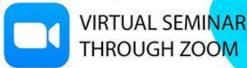
On May 1, 2020, I "attended" the new "Free Friday Virtual Seminar", sponsored by the Latin Comparative Pathology Group. The topic that day was "Freshwater Fish Pathology". The presenter was Dr. Paola Andrea Barato Gómez DVM, Esp, PhD, Executive Scientific Director, CORPAVET, from Colombia. The figures and tables were well cited, in according to the standards set by the Foundation. She was very secure and knowledgeable on the topic, and spoke in a



clear manner with adequate pauses and cadences, with minor mannerisms. The presentation itself was very well organized, and easy to follow.

She focused on three emerging diseases of tilapia, trout, and ornamental fish. She gave a basic overview of each disease, with appropriate gross and microscopic lesions. Time management, she finished on time with plenty of extra time available to answer questions from panelists, and she gave good quick answers to the questions presented, demonstrating again her knowledge and expertise.

POLA 2020 3-7 August 2020





TUITION: \$300

Foundation members

\$400 Non-members

Pathology of the Mouse

Pathology of the Rat

Pathology of Non-Human Primates

Pathology of Mini-Pigs

Pathology of the Rabbit

Pathology of the Ferret

Pathology of Laboratory Fish

Pathology of Guinea Pigs, Hamsters and Gerbils

Pathology of the Ferret

Mock Exam

The seminar is pre-approved by the AGVP MOC committee for 2 credits per half day attended.

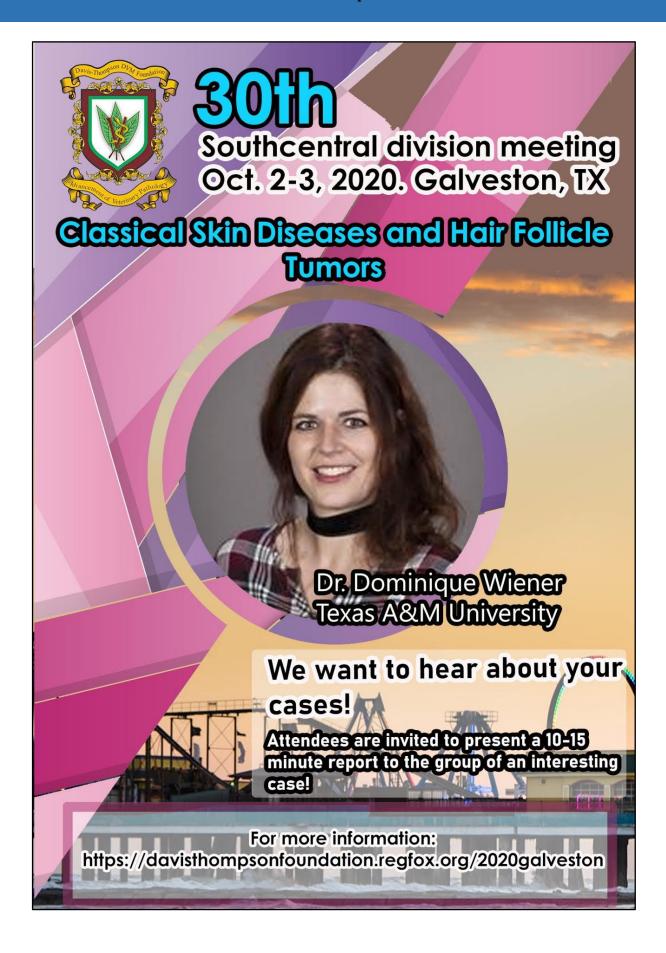
This course has been submitted (but not approved) for 32 hours of continuing education in jurisdictions which recognize RACE approval.

Register at:

https://davisthompsonfoundation.regfox.com/2020pola

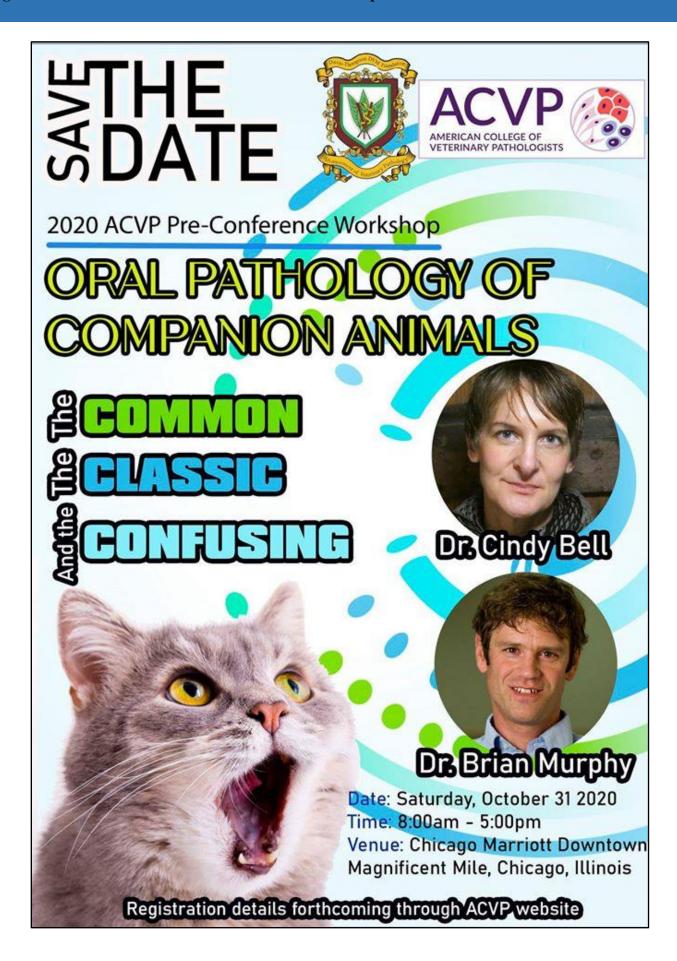








For more information and registration: https://davisthompsonfoundation.regfox.com/2020aavld



Review "Stories from Zoos and Aquaria" May 08, 2020

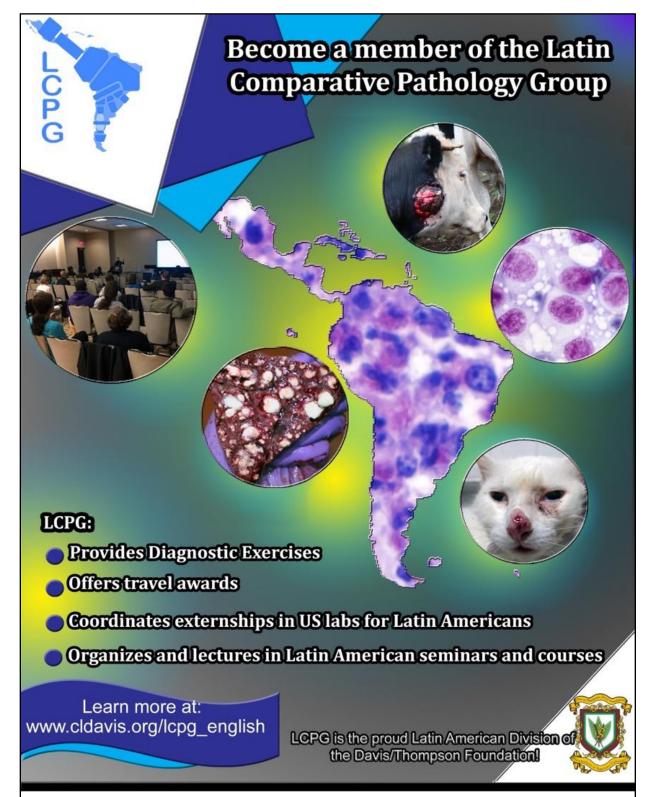
In the era of COVID-19, the CL Davis Thompson Foundation has managed to continue delivering high-quality, higheducational seminars veterinary pathologists and trainees around the world. The latest creation of the Foundation is the Free Friday Seminar Series. This series offers 1-2hour, virtual seminars for up to 500 participants. Seminars are led by pathology subject matter experts and are remarkably offered at no cost to participants. "Stories from Zoos and Aquaria," a recent installment of this series, was delivered by Dr. Carlos



Rodriguez. Dr. Rodriguez is a powerhouse in the field of zoo and wildlife pathology and has worked for over fifteen years at two of the most respected zoo/wildlife pathology programs in the world: Wildlife Conservation Society (Bronx, NY) and Walt Disney World (Orlando, FL), where he currently manages the pathology team. Dr. Rodriguez walked participants through the life of a zoo/wildlife pathologist, and showed us the types of fascinating cases discussed at Disney's inhouse, biweekly pathology rounds.

Dr. Rodriguez provides pathology support for not only the zoo collection, but also wildlife that live on the grounds, animals in quarantine, confiscated animals, and many national and international research and conservation programs. In "Stories from Zoos and Aquaria," participants witnessed the incredible diversity of Dr. Rodriguez's caseload, including EHV-1 encephalitis in a giraffe, cryptosporidial enteritis in a white-throated monitor, microsporidiosis in the digestive gland of a snail, and many more! Participants also learned about avian respiratory physiology, the biomechanics of the coxofemoral joint in ruminants, and the inherent risks for interspecies transmission in the popular mixed species exhibits, all of which are relevant to diagnosing (and controlling) disease in zoo and wildlife species. The seminar closed with a question and answer session whereby Dr. Rodriguez offered practical advice on diagnosing disease, how to obtain a job in zoo/wildlife pathology, and more. I am sure the hundreds of participants who joined Dr. Rodriguez's seminar will agree that this was an excellent, informative and entertaining seminar that offered a firsthand account of the work of a seasoned zoo/wildlife pathologist.

Elise LaDouceur, DVM, DACVP Chief, Extramural Projects and Research Joint Pathology Center



Contact Francisco.carvallo@gmail.com to join LCPG!

Membership fees:

- \$50 Professionals in US, Canada and Europe
- \$30 Professionals in Latin America
- \$25 Students in US, Canada and Europe
- \$15 Students in Latin America



Diagnostic Exercise From The Davis-Thompson Foundation



Case #139 Month: February Year: 2020

Contributors: Contributors: Ji-Hang Yin, DVM, MS; Tatiane Terumi Negrão Watanabe, DVM, MS, PhD Nobuko Wakamatsu, DVM, PhD, DACVP, DACPV. Department of Pathobiological Sciences, Louisiana State University, School of Veterinary Medicine, and Louisiana Animal Disease Diagnostic Laboratory, Baton Rouge, LA 70803

Clinical History: A 7-month-old, intact female Buff Silkie chicken was found dead with a clinical history of reluctance to move. The other chickens from the backyard flock were clinically normal.

Necropsy Findings: Major gross findings included a raised and extensively ulcerated cutaneous mass that measured 1.7 x 2.5 x 2.2 cm and was located dorsal to the left femoroacetabular joint (Figure 1A). The mass, which was soft and pale pink on cut surface, was covered with a dry reddish brown crust delimited by an up to 0.3 cm thick, firm, white rim. Within the caudal coelomic cavity, an approximately 5.0 x 3.0 x 3.5 cm, slightly firm, pale pink to tan mass was adhered to and partially infiltrated the right middle and caudal lobes and the left caudal lobe of the kidneys. It was also tightly adhered to the coelomic wall over the sacrum (Figure 1B). The lungs had multifocal pale pink to tan areas. Enlargement of sciatic nerves was not apparent. No other significant lesions were noted..



Figure 1

Follow-up Questions: Morphologic diagnosis, Etiology, Disease

Answers and more info here!

*The Diagnostic Exercises are an initiative of the Latin Comparative Pathology Group (LCPG), the Latin American subdivision of The Davis-Thompson Foundation. These exercises are contributed by members and non-members from any country of residence. Consider submitting an exercise!

Retiring?

Have slides left over from your recent slide seminar? Just looking to free up some storage space? The Foundation is looking for additional glass slides, kodachromes and other similar materials for its Correspondence Division and Study Centers. All materials should be well-identified with as much accompany history and discussion as possible, as these materials are expressly used for teaching. Moreover, as the Foundation is a publicly donative charity, all donated materials are tax-deductible. For more information, please contact Dr. Bruce Williams at bruce.h.williams.dvm@gmail.com.

Davis-Thompson Foundation Pathology Externship

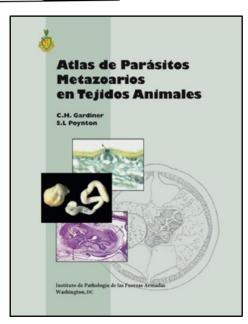
Since 1980, the Davis-Thompson Foundation lab sites have hosted more than 125 veterinary students at 8 participating diagnostic laboratories. These students usually have a strong interest in pathology itself or zoo or poultry medicine that require a strong pathology background. The Foundation is always interested in having veterinary students apply for an externship and we would like to add more externship sites that do not usually have veterinary students, to help increase their interest and knowledge of pathology with some off-campus experience. For more information, contact Dr. Jim Britt, jobritt@sbcglobal.net; 501-912-1449.

Did you know?

The "An Atlas of Metazoan Parasites in Animal Tissues" by Gardiner and Poynton is available on line? ...and in Spanish!!!

Check it out here:

http://cldavis.org/PDFs/atlas_esp.pdf



CALENDAR FOR UPCOMING EVENTS 2020

North America				
Country	Course	Date	Venue	Contact
USA	Descriptive Veterinary Pathology Course	June 1-5	VIRTUAL	Jey Koehler jaw0007@auburn.edu
	POLA 2020	August 3-7	VIRTUAL	Robert Kim robkkim@gmail.com
	30 Annual Southcentral Division Meeting	October 2-3	Galveston, TX	Jim Britt, Ed Dick jobritt@sbcglobal.net
	20 th Annual Diagnostic Pathology Seminar-AAVLD	October 16	Nashville, TN	Matti Kiupel kiupel@msu.edu
	ACVP Pre-Conference workshop	October 31	Chicago, IL	Jennifer Chapman chapmanjl@verizon.net
	Free Friday Seminars	Weekly: through December	VIRTUAL	Bruce Williams bruce.h.williams.dvm@gmail.com Paco Uzal fauzal@ucdavis.edu
	Tuesday Day Seminars	Every second or fourth week: through December	VIRTUAL	Bruce Williams bruce.h.williams.dvm@gmail.com Paco Uzal fauzal@ucdavis.edu
Oceania Oceania				
Country	Course	Date	Venue	Contact
Australia	Saturday seminars	Monthly: August through November	VIRTUAL	Tony Ross tony.rossvetpath@hotmail.com Hanna Bender hanbender@gmail.com
Latin America				
Country	Course	Date	Venue	Contact
Argentina	13 th Argentinean Seminar	September 2	VIRTUAL	Alejandra Quiroga maquiroga.unlp@gmail.com
Chile	Ruminant Symposium	August 15 or 16 (TBD)	VIRTUAL	Carlos Flores flores.carlos.vet@gmail.com
Mexico	2 st Mexican Seminar	TBD	Universidad Nacional Autonoma de Mexico, Mexico City	Laura Romero Romero lromeror@unam.mx
Uruguay	6 th Uruguayan Seminar	August 31	VIRTUAL	José Manuel Verdes jmverdes@fvet.edu.uy