Managing Editors: S. Shrader, DVM, PhD J. Leal, DVM, MSc, PhD J. Asin, DVM, PhD



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

A tax-exempt, donative, publicly-supported charity For the advancemet of veterinary and comparative pathology

# THE DAVIS-THOMPSON FOUNDATION NEWSLETTER

November 2021 VOL. 51



### **INSIDE THIS ISSUE**

### Monthly cover photograph winner: Laura K Bryan

Affiliated Institution: College of Veterinary Medicine & Biomedical Sciences Texas A&M University

Spiracular plate detail of the secondary screwworm Cochliomyia macellaria (not stained, 5X) found in an animal bite wound on the nose of a 3-month-old Angus steer.

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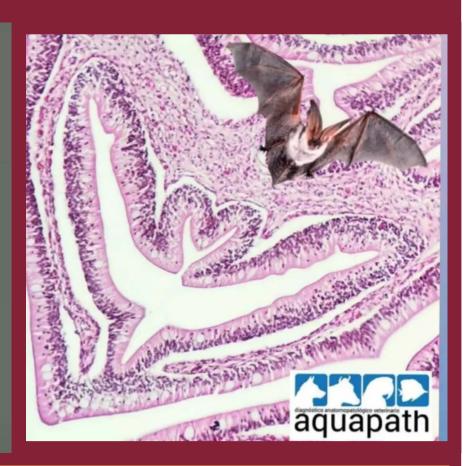
MCNAMARA, TRACEY S.

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# FOUNDATION ANNOUNCEMENTS

The winner of the 2021 Histolloween contest is image #1

It was submitted by Ruben
Arturo Lopez Crespo, a
graduate from the National
Autonomous University of
Mexico and now a
veterinary pathologist at
Aquapath in Colima, Mexico
whith special interest in
pathology of aquatic
organisms. He found the
silhouette of a bat during
histological examination of
fish intestine.



Congratulations to the 2021 Davis-Thompson Foundation Award Recipients!

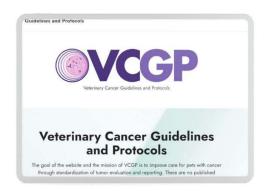
**CLICK HERE** for more information about the awards and awardees!

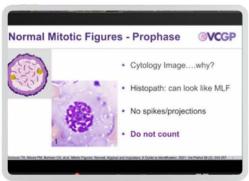




# Standardizing Tumor Pathology Reporting, Part 1

Hosted by the Davis-Thompson Foundation and co-sponsored by the ACVP and the Veterinary Cancer Guidelines and Protocols group



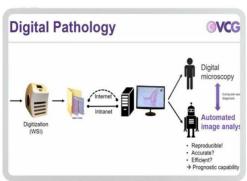


Kindly provided by Dr Taryn Donovan

In this amazing and extremely necessary seminar, our speakers shared valuable information on standarding tumor pathology reporting, generating great conversations!

The Q&A secton generated important discussions and exchanges among panelists and participants, and attendees were really engaged!

The seminar was a total hit, with over 750 attendees from all around the world!

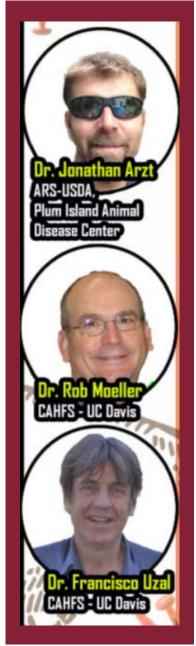


Kindly provided by Dr Christof A. Bertram

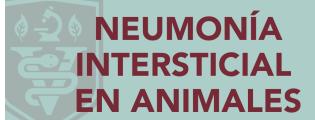
Over 150 participants registered for the recent 28 th Annual Zoo and Wildlife Pathology Workshop held virtually on Zoom on 4 October 2020 during the joint meeting of the American Association of Zoo Veterinarians and the European Association of Zoo and Wildlife Veterinarians. The audience was from 31 countries and included veterinarian students, interns, residents, and clinical veterinarians as well as veterinary pathologists. Dr. Jana Ritter, from Centers for Disease Control, presented the keynote: "Emerging Disease Preparedness, Diagnostics, and Response," followed by 17 presentations by participants. These talks covered infectious diseases seen in hard clams, cicadas, tentacle snakes, sage grouse, cheetahs, skunks, elephants, and elephant seals among others. Pathogens ranged from infectious tumors, bacteria, viruses, protozoa, to fungus. A contest to name the disease characterized by the inability to rise or even walk following 3 hours of zoom meetings was the lunchtime intermission entertainment; some of the winners were: zombification, asschemia, narcozoomosis, zoomopathy, and zoomatosis. The next Zoo and Wildlife Pathology Workshop is scheduled for 17 September 2022 in Houston, TX where we will hopefully meet in person (stay tuned for more detailed information on the topic and submission deadlines).



Dr. Talia Wong was one of the case presenters in the 2021 Zoo and Wildlife Pathology Workshop.







**1 OCTUBRE 2021** 

SEMINAR SERIES IN SPANISH

IN SPANISH

DR. FRANCISCO
CARVALLO

(VIRGINIA TECH)



"FUE BASTANTE BUENO, LA
CALIDAD DE LA INFORMACIÓN QUE
SE IMPARTIÓ FUE IMPRESIONANTE,
LAS ILUSTRACIONES Y EN GENERAL
EL CONTENIDO ES EXCELENTE."

"MUY BUENO Y ESPECIFICO Y FACIL DE COMPRENDER POR PARTE DEL DOCTOR."



"COMO SIEMPRE ES MUY
ENRIQUECEDOR ESCUCHAR AL
DOCTOR FRANCISCO CARVALLO,
TODO ME QUEDA MÁS CLARO Y
ANIMA A BUSCAR MÁS SOBRE EL
TEMA. EN GENERAL FUE UNA
EXCELENTE CHARLA, DIDÁCTICA,
CON EXCELENTES FOTOGRAFÍAS E
INFORMACIÓN RECIENTE.
MUCHAS GRACIAS."

"I ENJOYED THE SEMINAR! I AM NOT A NATIVE SPANISH SPEAKER, AND AM WORKING ON MY COMPREHENSION OF MEDICAL SPANISH AS I GET BACK INTO LANGUAGE PRACTICE. I APPRECIATE THE OPPORTUNITY TO EXPAND MY PATHOLOGY SKILLS AND LANGUAGE SKILLS AT THE SAME TIME."







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# **DIAGNOSTIC EXERCISE**



Case: 173; Month: September; Year: 2021

Contributors: Bianca S. de Cecco<sup>1</sup>, DVM, MSc; Mariano Carossino<sup>2</sup>, DVM, PhD, DACVM; Pilar Camacho-Luna<sup>3</sup>, DVM; Christopher Alling<sup>3</sup>, DVM; Renee Carter<sup>3</sup>, DVM, DACVO; Jacqueline E. Elliott<sup>2</sup>, DVM; Fabio Del Piero<sup>2</sup>, DVM, PhD, DACVP; Ingeborg M. Langohr<sup>2</sup>, DVM, MS, PhD, DACVP

<sup>1</sup>Department of Veterinary Pathology. Faculty of Veterinary Medicine, Federal University of Rio Grande do Sul, Porto Alegre, RS, Brazil.

<sup>2</sup>Louisiana Animal Diagnostic Disease Laboratory (LADDL) and Department of Pathobiological Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA, USA <u>mcarossino1@lsu.edu</u>

<sup>3</sup>Ophthalmology Service, Veterinary Teaching Hospital and Department of Veterinary Clinical Sciences, School of Veterinary Medicine, Louisiana State University, Baton Rouge, LA, USA.

Clinical History: A 2-year-old, female Poodle dog presented to the Emergency Service at the Veterinary Teaching Hospital (VTH), Louisiana State University School of Veterinary Medicine with a history of lethargy and anorexia. At clinical examination the dog was anemic and febrile. The dog was bilaterally blind. The right eye was buphthalmic and the intraocular pressure was elevated (42 mm Hg). During an ophthalmological consult, bilateral severe panuveitis and optic neuritis with secondary glaucoma in the right eye was diagnosed and treatment was instituted. Despite treatment, the intraocular pressure kept increasing (up to 72 mm Hg overnight), and the clinicians decided to enucleate the right eye due to poor prognosis. After one month, and no response to treatment, the left eye was also enucleated.

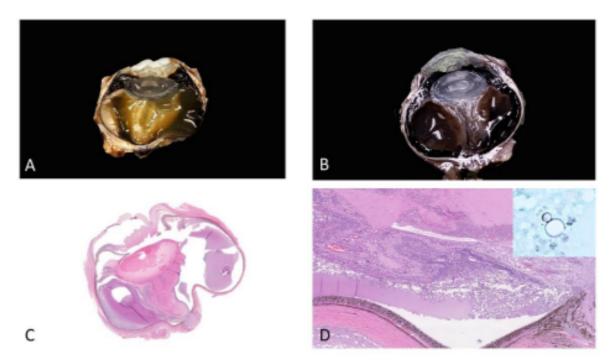


# DIAGNOSTIC EXERCISE



**Gross Findings:** Right and left eyes: The vitreous chamber was filled with a yellow, gelatinous exudate while the anterior chamber was filled with a translucent, gelatinous fluid. The retina appeared detached and embedded within the exudate present in the vitreous chamber.

### Gross and Microscopic images:



**Figure 1.** (A) Right eye, bisected specimen. (B) Left eye, bisected specimen. (C and D) Right eye, subgross and 40X, Hematoxylin and eosin. (D, Inset) Gomori methenamine silver stain. 40X.

### Follow-up questions:

- Microscopic description
- Morphologic diagnosis and cause
- Other possible causes

Click here for answers!

Associate Editor for this Diagnostic Exercise: Mariano Carossino

Editor-in-chief: Claudio Barros

# NOT JUST GLASS: GETTING MORE FROM OUR SAMPLES



# PATHOLOGY OF DOMESTIC TURKEYS

### Free Friday Seminar

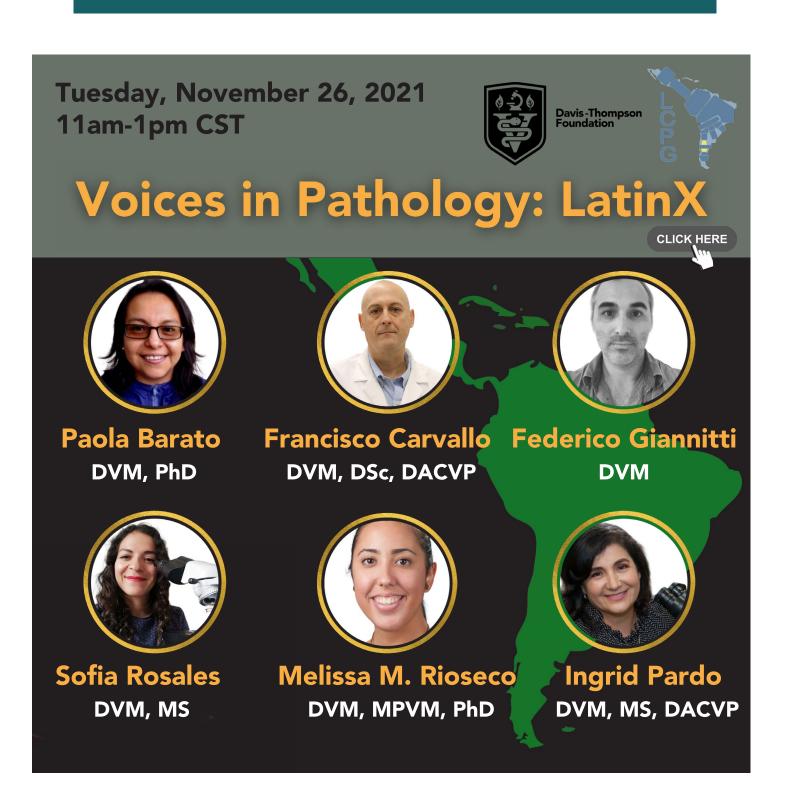
Friday, November 19, 2021 11:00am-12:30pm CST



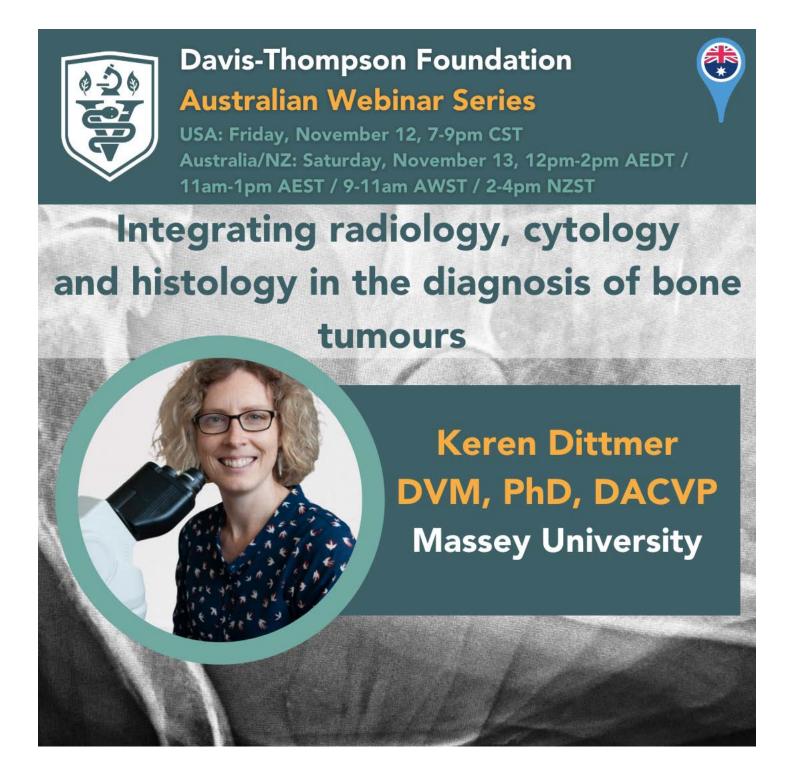
# Pathology of domestic turkeys



# **VOICES IN PATHOLOGY: LATINX**



## **AUSTRALIAN SEMINAR SERIES**



## SPANISH SEMINAR SERIES



Click here to register for individual seminars

# STANDARDISATION OF TUMOR PARAMETERS



## SEMINAR SERIES IN PORTUGUESE

# Seminar Series in Portuguese



17 novembro 2021 das 17-18:30 BRT



### **BSTP CORNER**



### BRITISH SOCIETY OF TOXICOLOGICAL PATHOLOGY

### **Notice of Future Meetings**



The 36th Annual Scientific Meeting of the BSTP
Pathology of Mice with Human Immune Systems (HIS mice)
Wednesday 10th, Thursday 11th and Friday 12th November 2021



The 36th ASM will be held as a virtual event using Zoom on the afternoons of Wednesday 10th, Thursday 11th and Friday 12th November 2021, from 13.00 – 17.00 (GMT+0, London/UCT+0) each day.

Continuing Professional Development: Approved by the Royal Society of Biology for the purposes of CPD, this event may be counted as approximately 30 credits.

Immunodeficient mice reconstituted with a human immune system are increasingly used for modelling the human immune compartment in numerous preclinical applications, such as adoptive cell therapy and immuno-oncology studies. With the advent of new Advanced Therapy Medicinal Products, humanised mice are a key component of efficacy and safety assessment in preclinical programmes, including GLP studies. However, limited information is available concerning the morphological aspects of human cell engraftment and the spectrum of spontaneous and experimentally induced histopathological lesions occurring in these mice.

Registration is still open, keep checking the website for up-to-date information, including details of bursaries - http://www.bstp.org.uk/events/the-36th-asm-of-the-bstp/

The 36th Annual General Meeting of the BSTP

Friday 26th November 2021

at 14.00 (GMY+0, London/UCT+0) and the duration of the Zoom meeting will be 2.5 hours.

The Annual General Meeting will start at 14.00 with an introduction by the President of the BSTP followed by a presentation from a keynote speaker. Questions will be taken at the end of this presentation.

Following the presentation, at approximately 14.40, the BSTP Council and Education Subcommittee will update you on what society has achieved over the last 12 months.

The Notice and Agenda for the Annual General Meeting, along with the Minutes of the 2020 AGM and the Financial Statement – Independent Examiners Report for the year 2020/2021 will be available October/November 2021.

Keep checking the website for up to date information - <a href="http://www.bstp.org.uk/events/bstp-annual-general-meeting/">http://www.bstp.org.uk/events/bstp-annual-general-meeting/</a>

BSTP webinars - in collaboration with the Society of Toxicological Pathology (STP)

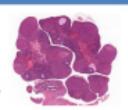
28th September 2021 - Arlin Rogers and Wendell Davis (Alnylam Pharmaceuticals) - Topic: A Pathologist Perspective on the Non-Clinical Safety Assessment of GalNAc-conjugated RNAi Therapeutics 2nd November 2021 - Alessio Ciulli (Dundee Uni) and Kevin Moreau/Kimberly Maratea (AZ) - Topic: PROteolysis Targeting Chimeras (PROTACs) (intro, safety, pathology)

For more information visit - http://www.bstp.org.uk/bstp-webinars/

### **BSTP CORNER**



Virtual Continuing Education Symposium 5: Female Reproductive System Tuesday 8th – Thursday 17th March 2022 13.00 – 16.30 (GMT+0/UCT+0)



CES 5 will be held as a virtual event using Zoom on the afternoons of Tuesday 8th, Wednesday 9th, Thursday 10th, Tuesday 15th, Wednesday 16th and Thursday 17th March 2022, from 13.00 – 16.30 (GMT+0/UCT+0) each day.

Continuing Professional Development: Royal Society of Biology CPD credits will be applied for.

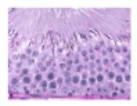
This Continuing Education Symposium will cover an overview of the female reproductive system in preclinical animal species.

Detailed information, including the programme and a registration form will be available in September/October 2021.

If you would like further information, have any queries or would like to reserve a place, please contact the BSTP Secretariat – <a href="mailto:bstpoffice@aol.com">bstpoffice@aol.com</a>

or visit http://www.bstp.org.uk/events/ces-5-female-reproductive-system/

Virtual Continuing Education Symposium 6: Male Reproductive System Tuesday 5th – Thursday 14th July 2022 13.00 – 16.30 (GMT+1/UCT+1)



CES 6 will be held as a virtual event using Zoom on the afternoons of Tuesday 5th, Wednesday 6th, Thursday 7th, Tuesday 12th, Wednesday 13th and Thursday 14th July 2022, from 13.00 – 16.30 (GMT+1/UCT+1) each day.

Continuing Professional Development: Royal Society of Biology CPD credits will be applied for.

This Continuing Education Symposium will cover an overview of the male reproductive system in preclinical animal species.

Detailed information, including the programme and a registration form will be available in December 2021/January 2022.

If you would like further information, have any queries or would like to reserve a place, please contact the BSTP Secretariat – <a href="mailto:bstpoffice@aol.com">bstpoffice@aol.com</a>

or visit http://www.bstp.org.uk/events/ces-6-male-reproductive-system/



### **BSTP CORNER**



#### DATES FOR FUTURE EVENTS TO BE ORGANISED BY THE BSTP:

#### Future BSTP events are as follows:

26th November 2021

5th - 14th July 2022

8th - 17th March 2022

10th, 11th & 12th November 2021 36th Annual Scientific Meeting - Pathology of mice with human

immune systems (HIS mice) BSTP Annual General Meeting CES 5 - Female Reproductive System CES 6 - Male Reproductive System

November 2022 37th Annual Scientific Meeting & AGM

March 2023 CES 7 - Infectious diseases in laboratory animals

July 2023 CES 8 - Nervous System

November 2023 38th Annual Scientific Meeting & AGM

March 2024 CES 9 - Urinary System July 2024 CES 10 - Digestive System

November 2024 39th Annual Scientific Meeting & AGM March 2025 CES 11 - Cardiovascular System July 2025 CES 12 - Endocrine System

November 2025 40th Annual Scientific Meeting & AGM

March 2026 CES 13 - Urinary System

July 2026 CES 14 - Lymphold & Haematopoietic Systems
November 2026 41st Annual Scientific Meeting & AGM
March 2027 CES 15 - Musculoskeletal System & Skin

The order of the CES will depend on the availability of high-quality speakers who are world experts in their particular field to present at the relevant meeting.

For details of webinars visit - http://www.bstp.org.uk/events/bstp-webinars/ or http://www.bstp.org.uk/non-bstp-events-and-webinars/

If you would like to receive information on any of these events as soon as the information becomes available, you need to make sure that the BSTP have your contact details on the mailing list.

You can withdraw your consent to receive communications from the BSTP at any time, by means of a written/emailed request for removal from the database.

Although the BSTP is in contact with similar organisations in Europe and the USA it is the policy of the BSTP NOT to pass on details of our mailing list.

The BSTP's Data Protection Policy can be found at http://www.bstp.org.uk/governance/

For more information on any of these meetings, keep checking the website - <a href="http://www.bstp.org.uk/events">http://www.bstp.org.uk/events</a> or contact the BSTP Secretariat - <a href="https://www.bstp.org.uk/events">bstpoffice@aol.com</a>

Details of future meetings are correct at the time this information is produced, the BSTP will not be held responsible for any changes to dates, venues and topics of these events.

If you have any queries, or require further information regarding this symposium, please contact:

BSTP | PO Box 819 | Harrogate HG1 9XF | North Yorkshire | UK

Tel: + 44 (0)7894 123 533

Email: bstpoffice@aol.com Website: www.bstp.org.uk

## **IDEXX CASECONNEXX CORNER**

Signalment: 11-year-old, female spayed, Labrador Retriever

Source/ History: Hard mass found by the client approximately 2.5 weeks ago. Right side, dorsal, next to anus

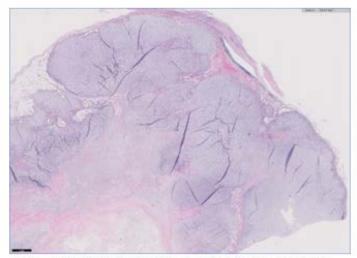


Figure 1. (1X magnification, H&E stain) Subcutaneous mass. Within the subcutis, is an unencapsulated, multinodular mass with a central region of necrosis,



The sample is composed of a well-demarcated, unencapsulated, moderately to densely cellular, multinodular neoplasm. The mass is composed of polygonal to spindle shaped cells arranged in streams, bundles and sheets within a variably dense and myxomatous to chondroid matrix. Neoplastic cells have variably distinct cell borders, mild to moderate amounts of amphophilic cytoplasm, round to oval nuclei with finely stippled chromatin and generally one small nucleolus. There is mild to moderate anisocytosis and anisokaryosis. In regions with more mature chondroid matrix, there are scattered binucleated chondrocytes. There is a locally extensive region of necrosis in the center of the mass.

### Microscopic Interpretation:

Chondrosarcoma (compatible with an extraskeletal chondrosarcoma)

Mitotic count: 16 in ten high power fields (total 2.37 mm2)

Vascular/lymphatic invasion. Not observed Margin assessment. Appears completely/narrowly excised with a closest margin of 0.1 mm composed of collagenous connective tissue

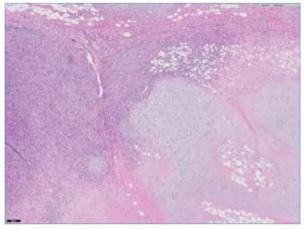


Figure 2. (5X magnification, H&E stain) The mass is composed of islands and lobules of cartilage and streams of spindle cells.

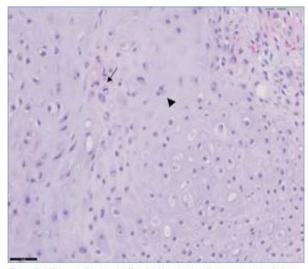


Figure 3. (40X magnification, H&E stain) Neoplastic cells have variably distinct cell borders, mild to moderate amounts of amphophilic cytoplasm, and round to oval nuclei. There are occasional binucleated cells (arrowhead) and mitotic figures (arrow) in chondrocytes.

#### Comments

Extraskeletal chondrosarcomas are locally aggressive neoplasms that rarely metastasize, though can recur if incompletely excised. In dogs, approximately 1% of chondrosarcomas are extraskeletal, and visceral organs are more commonly affected than the soft tissues (excluding mammary origin tumors). Metastatic potential is considered low based on published reports, though visceral extraskeletal chondrosarcomas have been associated with metastatic potential in some case reports.

A layer of connective tissue surrounded the submitted mass and there was no clinical history of connection to bone, and thus an extraskeletal chondrosarcoma was favored in this case. Further correlation with the overall clinical picture including any imaging was recommended to rule out the possibility that this mass could be arising from the nearby caudal vertebrae or pelvic bone.

References: Meuten, ed. (2017) Tumors in Domestic Animals, 5th ed., 400; Patnaik AK (1990), Vet Pathol. 27(1):46-55

Case by Joseph Malatos, DVM, DACVP





Visit CaseConnexx.com to Register

## **MISCELLANEOUS ANNOUNCEMENTS**



### **Membership Fees:**

\$50 - Professionals in US, Canada, and Europe

\$30 - Professionals in Latin America

\$25 - Students in US, Canada, and Europe

\$15 - Students in Latine America

### **CLICK HERE** to learn more.

Use this link to join: https://davisthompsonfoundation.regfox.com/lcpg-membership

LCPG is the proud Latin American Division of the Davis Thompson Foundation

### MISCELLANEOUS ANNOUNCEMENTS

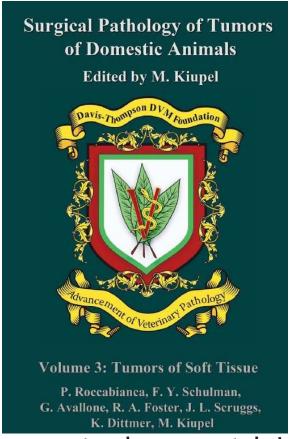


## www.vcgp.org is now live!

The goal of the website and the mission of VCGP is to improve care for animals with cancer through standardization of tumor evaluation and reporting. This website provides guidelines for assessing common parameters used in the light microscopic assessment of animal tumors as well as complete protocols recommended for investigators seeking to establish tumor grading systems. VCGP created this website to maintain these guidelines and protocols as centralized resources for veterinary anatomic and clinical pathologists to assist in reporting and gathering relevant information about aggressive tumors. Detailed protocols and guidelines are educational and research resources while the concise versions are user ready checklists for diagnosticians and editors/reviewers of manuscripts. These are living documents that will be updated and are continuations of manuscripts published by our veterveterinary pathologist colleagues.

Below is the link to a recent publication: International Guidelines for Veterinary Tumor Pathology: A Call to Action - https://doi.org/10.1177/03009858211013712

## **MISCELLANEOUS ANNOUNCEMENTS**



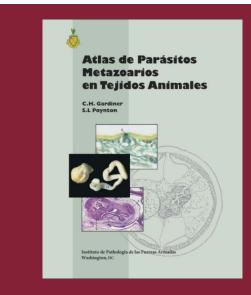
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### **RETIRING?**

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 offcampus experience. For more information, contact Dr. Jim Britt, jobritt@sbcglobal.net; 501-912-1449.



Atlas De Parasitos Metazoarios En Tejidos Animals - Click Here to Get a Digital Download!



DAVIS-THOMPSON FOUNDATION Phone: 847-367-4359 Fax: 847-247-1869

davisthompsonfoundation.org