

Davis-Thompson Foundation 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

October 2021

VOL. 51



INSIDE THIS ISSUE

Monthly cover photograph winner: Nicole R. Kraipowich

*Affiliated institution: IDEXX Laboratories

Case description: A 4-year-old dog presented with a focal dermal nodule. Histology revealed a cross section through a tick (species not determined) along with localized lymphohistiocytic inflammation.

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FOUNDATION ANNOUNCEMENTS





DAVIS-THOMPSON FOUNDATION Be sure to check out the new Davis-Thompson Foundation website at https://davisthompsonfoundation.org/

SEMINAR REVIEWS



Canine Prostate Pathology

Dr. Chiara Palmieri



"Excellent seminar. Up-to-date, concise, straight to the points, interactive and provides great comparative views of prostates between human and dogs."

"Always great to listen to a passionate presenter who is at the very top of their field of interest."



"Dr. Palmieri is fantastic! Her presentation is very informative and the images she shared are amazing!"

SEMINAR REVIEWS





Dr Eric Gingerich, Dr Gregg J. Cutler, Dr H Shivaprasad, Dr Sato Yuko

August 10th 2021

By Luan C. Henker, UFRGS.

"Very interesting and well delivered. The active audience and abundance of guestions was highly appreciated."

"Excellent and very informative for both infield Veterinarians. **Anatomic and Clinical** Pathologists."

"Very informative lectures with excellent photos. A vast amount of current information on the poultry industry/management was also shared."

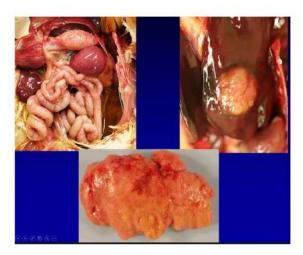


Image kindly provided by Dr H Shivaprasad





Case:172; Month: September; Year: 2021

Question Sheet

Contributors: Alex dos Santos*, DVM, MS, Doctorate candidate, Mariana Martins Flores*, DVM, MS, Doctor in Veterinary Pathology. *Laboratory of Veterinary Pathology, Universidade Federal de Santa Maria (UFSM), Santa Maria, Rio Grande do Sul, Brazil. <u>mariana.flores@ufsm.br</u>

Clinical History: This 8-month-old, male, mixed breed domestic shorthaired cat had a recent history of acute apathy and anorexia. It remained under hospital care for two days, during which it did not produce any urine. On the second day of hospitalization, another cat from the same household was brought in with similar clinical signs. These cats did not have any history of recent ingestion of antibiotics or other medication. Furthermore, they did not have any street or yard access since they were kept in an apartment. Both cats died spontaneously after a brief hospitalization period.

Laboratory Findings: Marked increase of urea and creatinine in both cats was reported (values not informed). On abdominal ultrasound, both cats had perirenal edema, and small amount of free abdominal effusion was observed in this cat.

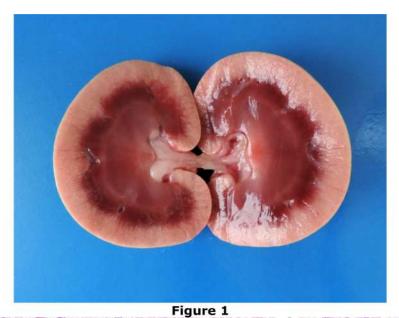
Pathology: At **necropsy** there was moderate amount of translucent, slightly yellowish fluid within the abdominal cavity, thoracic cavity and pericardial sac. There was moderate diffuse pulmonary edema. Moderate perirenal edema was observed bilaterally. The kidneys were diffusely swollen and pale (Fig. 1). On **histopathologic** exam, the cortical tubular epithelial cells were swollen, with hypereosinophilic cytoplasm and nuclear changes (karyolysis, pyknosis and karyorrhexis). These cells were frequently detached from the basement membrane. Some other tubular epithelial cells were swollen and markedly vacuolated. Accompanying these changes, multiple granular casts filled the tubular lumens in the cortical and medullar regions (Fig. 2).

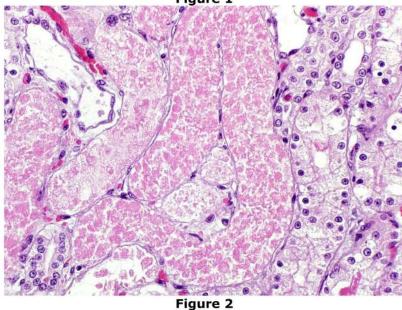
Gross and Microscopic Images:



DIAGNOSTIC EXERCISE







Follow-up Questions:

- What is your morphologic diagnosis?
- What is your etiologic diagnosis?
- What is the pathogenesis for the acute anuria presented by this cat?
- Can you name possible causes for this condition in cats?

Associate Editor for this Diagnostic Exercise: Mariana M. Flores Editor-in-chief: Claudio Barros

> Click here for answers

HEMOSTATIC DISORDERS

Free Friday Webinar

October 8, 2021 11:00 am -12:30 pm CDT



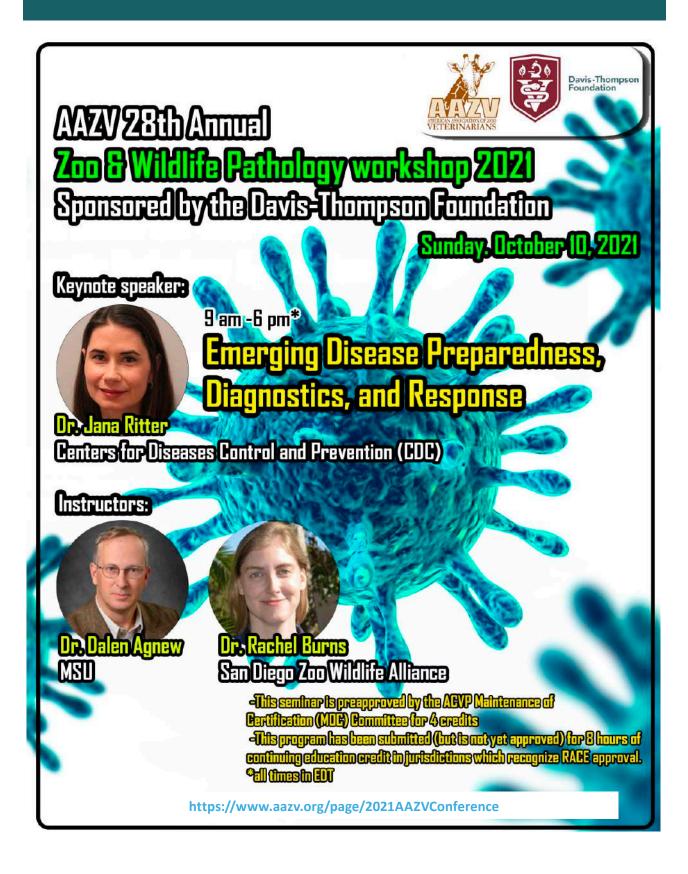
Davis - Thompson Foundation

Molecular basis for congenital veterinary hemostatic disorders

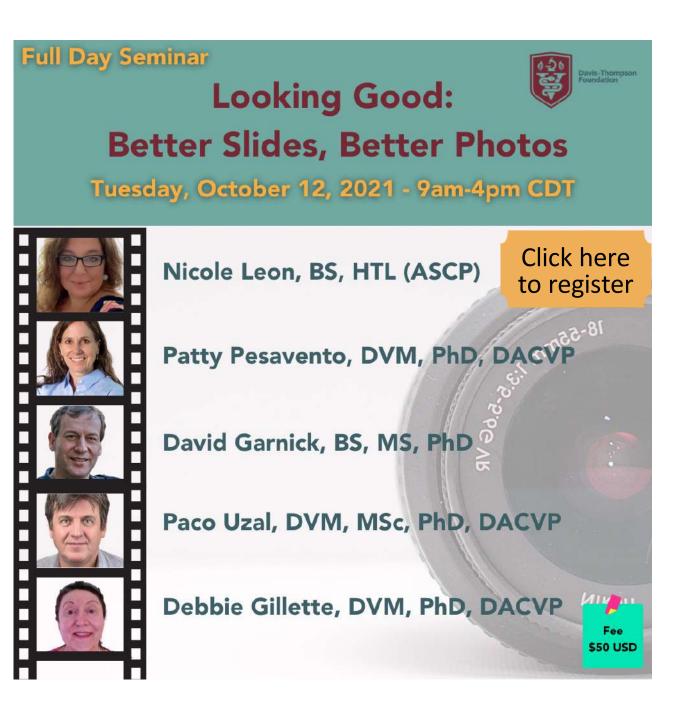
Pete W. Christopherson DVM, PhD, DACVP

Click here to register

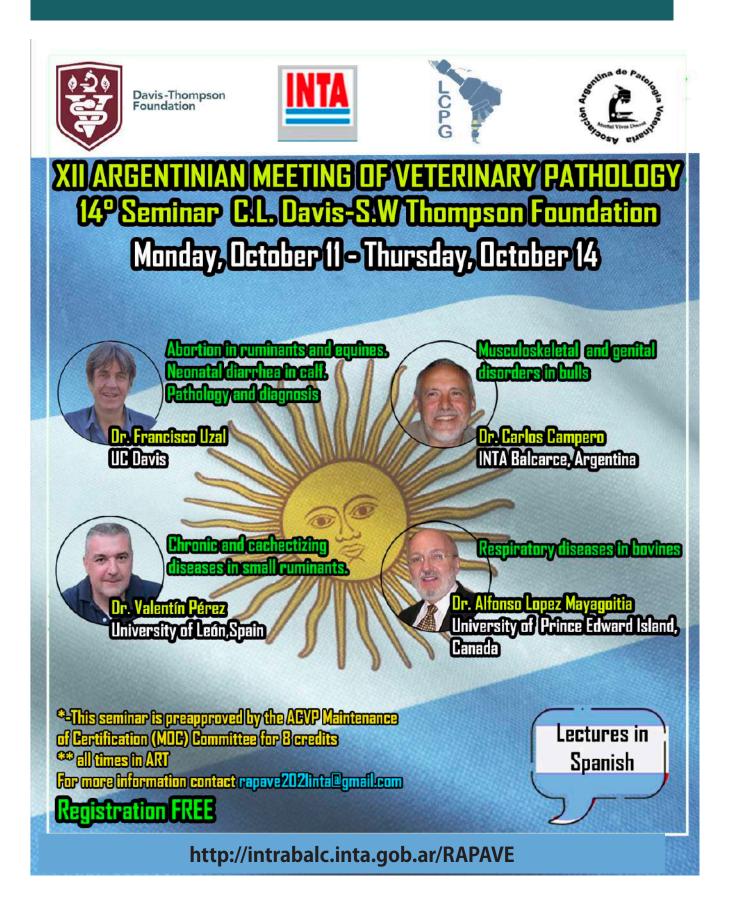
AAZV ZOO & WILDLIFE PATHOLOGY WORKSHOP



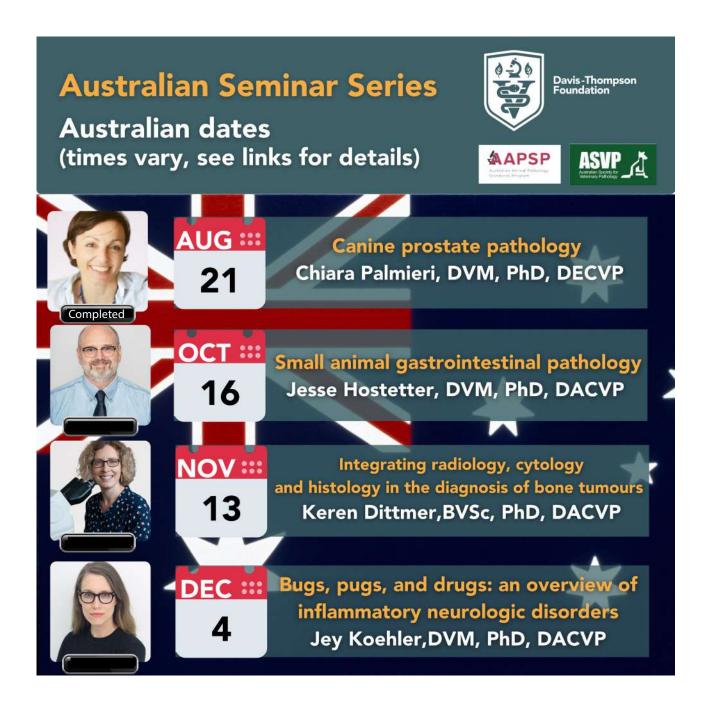
BETTER SLIDES & PHOTOS SEMINAR



ARGENTINIAN MEETING (RAPAVE)



AUSTRALIAN SEMINAR SERIES



Click here to register for individual seminars

THE BLOOD-BRAIN BARRIER



AAVLD TRANSBOUNDARY DISEASES



MEXICAN SEMINAR



EL EVENTO SE LLEVARÁ A CABO EN HORARIO DEL CENTRO DE MÉXICO (CD.MX.)

Click here to

register

SPANISH SEMINAR SERIES

Spanish Seminar Series



/6/2021 Casos practicos de patologia aviar Natàlia Majó

(Universitat Autònoma de Barcelona)



/3/2021 Enfermedades de conejos

Juan Manuel Corpa Arenas (Universidad CEU Cardenal Herrera)t

Patologia

de bovinos

Mario Bedolla

de Mexico)

macroscopica

(Universidad Autonoma

10/1/202

Neumonía intersticial en animales: Definiciones, causas y mecanismos Francisco Carvallo (Virginia Tech)



All seminars in Spanish

de cetaceos Antonio Fernandez

Universidad de las Palmas de Gran Canaria, Islas Canarias

Enfermedades



0/2021 Patología de lagomorio con especial énfasis en la enfermedad vírica hemorrágica Javier Asin (UC-Davis)

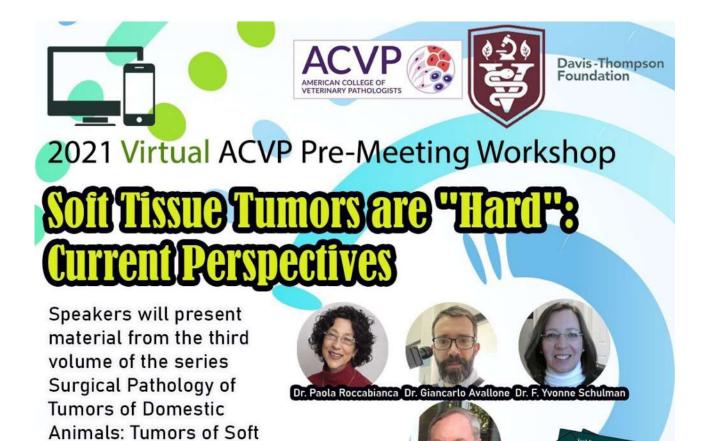
Click here to register for individual seminars

Tissues, with a special

guest lecture by Dr.

Brian Summers.

ACVP PRE-MEETING WORKSHOP



Date: Friday, October 29, 2021 8:00 am-12:30 pm (CDT) Saturday, October 30, 2021 8:00 am-12:00 pm (CDT)

Click here to register

Gues

Dr. Brian Summe

STANDARDISATION OF TUMOR DIAGNOS-TIC AND PROGNOSTIC PARAMETERS



SEMINAR SERIES IN PORTUGUESE



Click here to register for individual seminars

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 - <u>http://www.bstp.org.uk/events/the-36th-asm-of-the-bstp/</u>

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 - <u>http://www.bstp.org.uk/events/bstp-annual-general-meeting/</u>

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 – <u>bstpoffice@aol.com</u>

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.

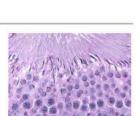
This Continuing Education Symposium will cover an overview of the male reproductive system in preclinical animal species.

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 – <u>bstpoffice@aol.com</u>

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: 10th, 11th & 12th November 2021 36th Annual Scientific Meeting - Pathology of mice with human immune systems (HIS mice) 26th November 2021 **BSTP Annual General Meeting** 8th - 17th March 2022 **CES 5 - Female Reproductive System** 5th - 14th July 2022 **CES 6 - Male Reproductive System** November 2022 37th Annual Scientific Meeting & AGM CES 7 - Infectious diseases in laboratory animals March 2023 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 - Lymphoid & 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 - http://www.bstp.org.uk/events or contact the BSTP Secretariat - bstpoffice@aol.com 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 + 44 (0)7894 123 533 Tel:

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

IDEXX CASECONNEXX CORNER

Signalment: 13-year-old, female, Green iguana (Iguana iguana) Source/ History: Patient presents for mass removal. Mass has grown slightly in size

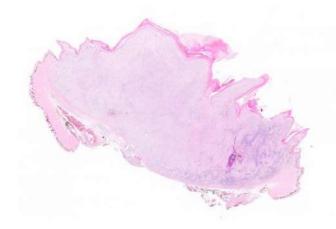


Figure 1, (1X magnification, H&E stain) Skin mass, A well-demarcated and unencapsulated neoplasm expands the dermis and subcutis

Microscopic Description:

Microscopic Description: Expanding the dermis and subcutis is a well-demarcated, unencapsulated, densely cellular mass composed of round cells arranged in sheets. The neoplastic cells have distinct cell margins, mild to moderate amounts of eosinophilic, finely granular cytoplasm, round nuclei with finely stippled to vesicular chromatin, and generally one nucleolus. There is mild anisocytosis and anisokaryosis, and occasional binucleated cells. Scattered throughout the mass are small numbers of granulocytes, and occasional plasma cells and lymphocytes. There is hyperkeratosis on the overlying epidermis and multifocal serocellular crusts.

Microscopic Interpretation:

Cutaneous mast cell tumor Mitotic count: 3 in ten high power fields (total area of 2.37 mm²) Vascular/lymphatic invasion: Not observed

Margin assessment: Incompletely excised - mast cells are present at the deep margin of the sample in one region. There is a closest lateral margin of 0.2 mm

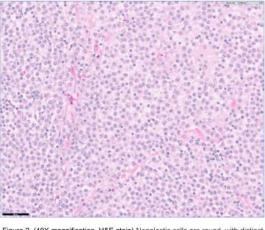


Figure 2. (40X magnification, H&E stain) Neoplastic cells are round, with distinct cell borders and mild to moderate amounts of finely granular eosinophilic cytoplasm. Within the mass are small numbers of scattered granulocytes.

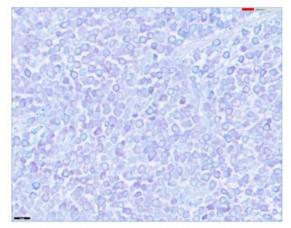


Figure 3. (60X magnification, Giemsa stain) Neoplastic round cells contain positive cytoplasmic metachromatic granules

Comments:

Comments: Mast cell tumors are common skin neoplasms in domestic canines, felines, and ferrets, though they are rarely reported within reptilian species. Multicentric cutaneous mast cell tumors and apparent mastocytosis on peripheral blood have been described in one case report in a common green iguana (Iguana iguana). Due to the rarity of cutaneous mast cell tumors in reptilian species, the exact biological behavior and prognosis is uncertain. Given the findings in the one case report in a common green iguana, evaluation for and monitoring for the potential development of additional tumors is likely warranted.

References: Reavill, D et al. Conference: Association of Reptilian and Amphibian Veterinarians, 2000. Mast Cell Tumor in a common green iguana (Iguana iguana); Tamlin VS, Bottema CDK, Peaston AE. Comparative aspects of mast cell neoplasia in animals and the role of KIT in prognosis and treatment. Vet Med Sci. 2020 Feb;6(1):3-18.







Visit CaseConnexx.com to Register

MISCELLANEOUS ANNOUNCEMENTS

Become a member of the Latin Comparative Pathology Group LCPG: **Provides Diagnostic Exercises Offerstravel** awards **Coordinates externships in US labs for Latin Americans** Organizes and lectures in Latin American seminars and courses

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



Veterinary Cancer Guidelines and Protocols

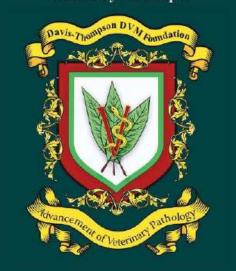
www.vcgp.org is now live!

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

Surgical Pathology of Tumors of Domestic Animals Edited by M. Kiupel



Volume 3: Tumors of Soft Tissue

P. Roccabianca, F. Y. Schulman, G. Avallone, R. A. Foster, J. L. Scruggs, K. Dittmer, M. Kiupel

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Davis-Thompson T-shirts! \$20 + shipping

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.

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.**



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