



The Work-Up

Diagnostic Services Unit | Issue 12 - March/April, 2024

Inside this Issue

SPECIAL EDITION: Necropsy Photos

Spotlight: Mel Nicolas, Patrick Fuller

Bovine: Sub-endocardial mineralization; Polioencephalomalacia

Canine: Atrioventricular valve endocardiosis; Prostatic ganglioneuroblastoma

Capybara: Severe dental disease

Equine: Lymphoma

Feline: Hypertrophic osteopathy

DSU Announcements

Holiday Closures:

Easter: Friday, March 29 to Monday, April 1, 2024 (inclusive)

The DSU is excited to announce funding under the Sustainable Canadian Agricultural Partnership, a federal-provincial-territorial program to extend our Alberta Supported Pricing and VOIS support to production animal submissions until March 31, 2025!

After-Hours Drop-Off: The DSU has an outdoor cooler for after-hours drop-off of DSU submissions smaller than 100lbs. Please contact DSU@ucalgary.ca for information on accessing the cooler.

New serology tests are available for small and large ruminants. Please use the updated submission forms available on the [DSU website](#).

The UTI study through Dr. Menard's lab is now complete.

The DSU Cytology Service is closed until September 2024. Cytology submissions will be sent out during this time.

SPOTLIGHT

The necropsy technicians play an important role at the DSU, ensuring work within the pathology lab progresses efficiently and safely. They assist the pathologists with preparation of animals for postmortem exam, sample collection and processing, clean-up, and photographing case material for records, teaching, and publication. Senior Necropsy Technician, Mel Nicolas, is known for his high quality necropsy photos, some of which are featured in this edition of The Work-Up.



Mel Nicolas started his career as a Necropsy Technician at the University of Calgary, Faculty of Veterinary Medicine in 2009. He assists pathologists and researchers in the preparation of animals for postmortem examination and in sample collection. He particularly excels at more complex dissections involving the collection of samples such as brain, spinal cord and bone marrow.



Patrick received his Bachelor of Science in Biology from the University of British Columbia in 2015 and his Animal Health Technology diploma from Thompson Rivers University in 2019. From there, he worked at the Centre for Comparative Medicine at UBC for 4 years. As a research RVT, he was given the opportunity to work with a variety of species including pigs, alpacas and sheep involved in research projects ranging from spinal cord injury therapies, renal transplants, and open-heart surgery. After two and a half years he was promoted to senior technician. He helped coordinate research projects with research teams assigned to him and managed a team of specialized Registered Vet Techs at the facility. In 2021 he received his Registered Laboratory Animal Technician designation and in 2023 he completed his Certificate in Project Management from the Sauder School of Business. Patrick joined the DSU in 2023 as a Necropsy Technician.



Spleen, dog. Metastatic prostatic ganglioneuroblastoma.



Forearm, cat. Hypertrophic osteopathy.



Heart, bovine. Subendocardial mineralization.

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Diagnostic Services Unit

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DSU Team

Anatomic Pathologists:

Dr. Jennifer Davies
Dr. Dayna Goldsmith
Dr. Ashish Gupta
Dr. Cameron Knight
Dr. Carolyn Legge
Dr. Jamie Rothenburger (*on leave*)
Dr. Amy Warren
Dr. Katie Waive
Dr. Erin Zachar

Clinical Pathologists:

Dr. Angelica Galezowski
Dr. Catherine Wagg (*sabbatical*)
Dr. Amy Warren

Microbiologist:

Dr. Beverly Morrison

Support Staff:

Jim Carlsen
Nancy Coulter
Dr. Manga Devi
Mai Farghaly
Patrick Fuller
Karan Gadani
Lori Goodbrand
Kerin Hudson
Chloe Ingham
Jennifer Larios
Callum MacDonald
Mel Nicolas
Ciara O'Higgins (*on leave*)
Dr. Lindsay Rogers (*on leave*)
Sara Skotarek Loch

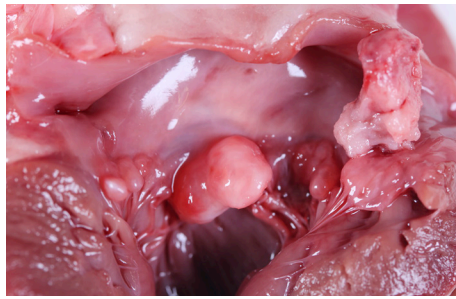
DSU Contact Information

<https://vet.ucalgary.ca/DSU>

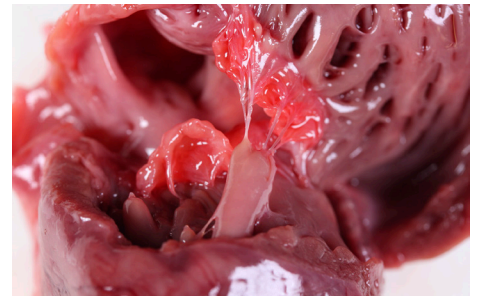
E-mail: dsu@ucalgary.ca

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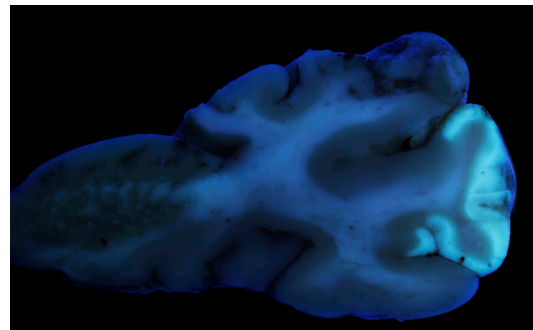
Heart, dog. Atrioventricular valve endocardiosis.



Jaw, capybara. Normal.



Spleen & large colon with mesenteric lymph nodes, horse. Multicentric lymphoma (lymphosarcoma).



Brain, bovine. Polioencephalomalacia (autofluorescence of cerebral cortex under black light).

Tips & Tricks - Taking photos in the field

Submitting photos with biopsy or field necropsy samples can be very helpful to the pathologist working up the case. To improve photos, try these tips:

- Hold the camera perpendicular to the floor/table/ground (as if you were taking a radiograph) to keep the organ and lesions in proportion.
- Ensure you have plenty of light.
- Make sure the background is clean and free from tools, fingers, and blood.
- Take a photo of the entire organ and then a close-up of the lesion. If the organ has a lumen, open it; if it is solid, take a photo of the external and cut surface.

