Diagnostic Update

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http://www.upei.ca/avc/diagnostic-services

/ Fall, Winter & Spring Hours: Monday to Friday - 8:00 am to 5:00 pm Summer Hours (July 4-September 1, 2017): Monday to Friday - 8:00 am to 4:30 pm Saturday - Bacteriology 9:00 am to 12:00 pm & Clinical Pathology 8:00 am to 4:00 pm

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Surgical Biopsies: To Ink or Not to Ink?

By Shannon Martinson, Veterinary Anatomic Pathologist

You may have noticed that pathologists from Diagnostic Services were handing out samples of ink (compliments of Bradley Products) along with inking instructions at the recent Atlantic Provinces Veterinary Conference in Halifax. With advances in veterinary oncology and improvements in the



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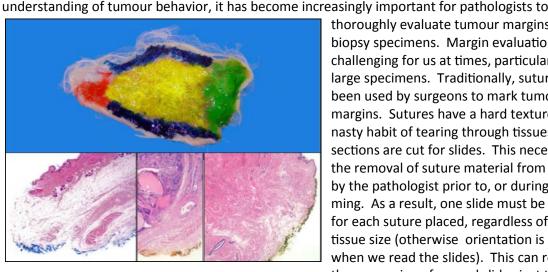


Figure 1: Images depicting a section of canine skin containing a small mammary mass with the surgical margins inked. The top gross image shows the cut or deep surface. The cranial margin was marked with red ink, the caudal margin with green, the deep margin with yellow and the lateral margins with blue. The blue, yellow and green inks are easily visible on the histology slides allowing us to orient the margins with respect to the patient and to ensure we are evaluating true surgical margins. Interestingly, the red ink was not easily visible on the histology slide, suggesting it may not be ideal. For color images please refer to the online version: http://www.upei.ca/avc/diagnostic-services/newsletters

thoroughly evaluate tumour margins in biopsy specimens. Margin evaluation can be challenging for us at times, particularly with large specimens. Traditionally, sutures have been used by surgeons to mark tumour margins. Sutures have a hard texture and a nasty habit of tearing through tissues as the sections are cut for slides. This necessitates the removal of suture material from tissue by the pathologist prior to, or during, trimming. As a result, one slide must be made for each suture placed, regardless of the tissue size (otherwise orientation is lost when we read the slides). This can result in the processing of several slides just to attain margins, a practice that can drive up the costs of performing biopsies. Ink is a much better solution – literally! Ink, when applied properly, has several benefits compared to sutures (Figure 1). Ink can be applied along the entire tumour margin and is easily visible to us during trimming and while reading the histologic slide. The presence of ink at the tissue margins on the slide improves our confidence that we are evaluating a true



surgical margin and not a cut made into the tissue following removal. Different colours of ink can be used for different areas of interest and to provide orientation of the tissue with respect to the patient. When different colours are used, it may be possible to place more than one section on a slide, a practice that allows us to keep costs down. Because completeness of excision may have prognostic value and may influence the use of adjunct therapy, margin evaluation has become a crucial aspect of our job and our goal is to help you help us do the best job possible!

Client Surveys: Your Voice Matters to Us!

By Jodie Bowmaster, Quality Assurance Manager

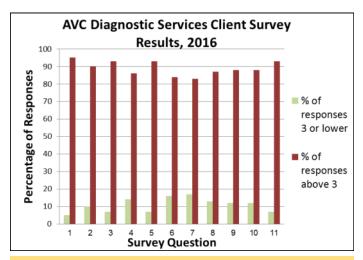


Figure 1: Survey results summary (response scale of 1 to 5). Survey questions available at: http://www.upei.ca/avc/diagnostic-services/client-survey

The Atlantic Veterinary College (AVC) Diagnostic Services is an ISO 17025 accredited laboratory and as a result is required to routinely survey our clients to obtain feedback. The survey is designed to address client satisfaction responses concerning customer service, testing activities, and the quality management system. A record number of surveys were completed for 2016 as 41 clients took the time to complete the 1 page survey. Results showed that we continued to provide excellent service to most of the respondents (Figure 1). However, a few surveys had negative responses for some or all of the questions. Although the survey is designed to be anonymous, it is difficult for us to improve services when we do not have specific details about situations needing improvement. Therefore, there will be an opportunity in future surveys to provide reason(s) for any responses indicating lower satisfaction (3 or lower) so we may take action to correct the situation. We truly appreciate all comments and our goal is to provide excellent service to all of our clients all of the time. The client survey can be found on the AVC

Diagnostic Services website (see link above) and a completed survey can be attached to your next submission form to save \$10. Please note that we will honor one discount per year per clinic. Thank you very much for helping us improve!

Retirement of Dr. Barbara Horney

By Shelley Burton, Veterinary Clinical Pathologist



Figure 1: Barbara Horney (third from left) with her family Ellie, Sam and Carl, and dog Jessie.

Dr. Barbara Horney (Figure 1) recently retired after 29 years at the Atlantic Veterinary College (AVC). Originally from Ontario, Barb followed in her father's footsteps to become a veterinarian. Upon graduating from the Ontario Veterinary College in 1982 and finishing her PhD in 1987, Barb moved to PEI in 1988 to join the newly established AVC.

Dr. Horney was instrumental in setting up the clinical pathology section of the Diagnostic Services Laboratory and in developing all clinical pathology courses. She continued to contribute to the veterinary curriculum as she spent her last sabbatical developing a framework for teaching veterinary professionalism. Her passion for ethics and integrity in research have made her a popular speaker at the AVC and further afield.

Many clients of our diagnostic laboratory have had the pleasure to speak to Barb about challenging clinical pathology data or cytology results and may feel they know her well. However, here are some interesting facts that may not be well known about her:

- She graduated with the gold medal for the highest academic average of her veterinary class.
- She was the first to publish that an increase in serum ALP activity in hyperthyroid cats is partly from a bone isoform. We use this information daily in our interpretations!
- She led the research project allowing a new technology called CEDIA to be used on our automated chemistry analyzer, including the ability to measure feline T4 concentrations quickly.
- She is highly knowledgeable about world events, infectious diseases and movie star trivia!

Barb will be definitely missed but as she has no plans to leave PEI, we hope she will still come to rounds occasionally so we can continue to learn from her and enjoy her contributions. All of us wish Dr. Barb Horney the best in her retirement!

What is Your Diagnosis?

One of these dog breeds is most likely to be affected by an endocrine disease. Which breed and which condition? See page 4 for the answer.







 $B. \ \underline{\text{http://canineculturemobile.com/Nova-Scotia-Duck-Tolling-}} \\ \underline{\text{Retriever.html}}$



C. http://syler.com/sagebrush/Shelties/Ceili.htm

Laboratory News

By Cornelia Gilroy, Veterinary Clinical Pathologist

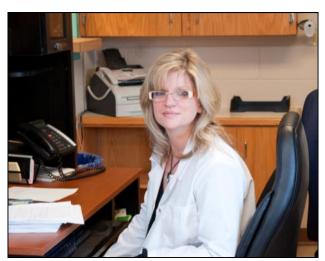
Here are some recent happenings in the Diagnostic Services Laboratory:

- Dr. Janet Saunders, who has worked at the Atlantic Veterinary College (AVC) in various capacities, began her permanent position as a parasitology technologist with Diagnostic Services on October 10th, 2016.
- Dr. Barbara Horney, clinical pathologist, retired at the end of December 2016 after 29 years of service (please see full article on page 2).
- National Medical Laboratory week was celebrated April 16th 22nd.
- Anatomic pathologist, Dr. Andrea Bourque, and clinical pathologist, Dr. Cornelia Gilroy represented the Diagnostic Services
 Laboratory at the Atlantic Provinces Veterinary Conference (APVC) from April 21st- 23rd at our booth. The Diagnostic Services
 Laboratory was pleased to offer three draw prizes. Congratulations to our winners:
 - ♦ First prize of two complimentary surgical biopsies: Dr. Rhonda Stone from Fredericton Animal Hospital, Fredericton, New Brunswick.
 - ♦ Second prize of two complimentary cytologies: Ms. Janet Boehner, South Shore Veterinary Services, Wileville, Nova Scotia.
 - ♦ Third prize of one complimentary complete blood count and chemistry profile test: Ms. Tisha Black, Amherst Veterinary Hospital, Amherst, Nova Scotia.
- Welcome to our new faculty some new and some familiar! Dr. Laura Bourque, anatomic wildlife pathologist, began her new position at the AVC on May 1st. Dr. Noel Clancey, clinical pathologist, and Dr. Melanie Buote, anatomic pathologist, both began on July 1st.
- Congratulations to Ellen McMahon who received a University of Prince Edward Island Presidential Recognition Award of Merit for Staff for Exemplary Service in May 2017.
- Dr. Carmencita Yason, Virologist, Liz Dobbin, Director, and Dr. Dante Mateo, Researcher, attended the Canadian Animal Health Laboratorians Network annual conference from June 4th- 7th. The theme for the conference was "Laboratory based disease intelligence in 2017: new and practical approaches".

Staff Focus

Lisa Cox

By Cornelia Gilroy, Veterinary Clinical Pathologist and Andrea Bourque, Veterinary Anatomic Pathologist



If you have called the post-mortem office in the Atlantic Veterinary College (AVC) Diagnostic Services to make inquiries or to look for test results in the last 25 years, you have likely had the pleasure of talking with Lisa Cox.

Originally from Charlottetown, Prince Edward Island, Lisa attended Holland College where she completed a 1 year accounting course. She then enrolled in a 2 year medical administrative assistant course which she completed 6 months early! Shortly thereafter in 1987, Lisa started working at the AVC, initially in the Department of Pathology and Microbiology as an administrative assistant. Within 2 years, she was working half time in both virology and the post-mortem office. In 1999, Lisa transitioned into a permanent position in the post-mortem office.

Lisa's duties are many. Apart from general administrative tasks, Lisa assists with sample receiving, data entry into the laboratory management system,

ensuring biopsy and necropsy reports get delivered quickly to our clients and updating files for the website. Lisa deftly responds to many of the inquiries that come from the veterinary clinics that use our biopsy and post-mortem services. She interacts with farmers, clinicians, veterinary students and grieving animal owners on a daily basis. Her professionalism, compassion and empathy are a mainstay of the services our laboratory offers.

When not at work, Lisa has a busy home life involving her husband, Kent, 3 children and many furry friends, which currently include a dog, 3 cats and 2 horses! Their 2 older children, Isaac and Olivia, are both university students while Abigail is in high school. Lisa enjoys walking their Golden Retriever, Hunter, and spending many hours at the horse barn as her daughters prepare for their hunter/jumper competitions. Over the years there have also been many family skiing trips to Sunday River in Maine and camping expeditions, including at Fundy National Park. Other personal pursuits that Lisa enjoys are knitting and reading.

Lisa's competence, sense of humor, great work ethic, conscientious attention to detail, and warm personality have made her a pleasure to work with. AVC Diagnostic Services has been so fortunate to have Lisa work with us over the last few decades and we hope we can continue to benefit from her skills and enjoy her wonderful personality for many years to come.

Reader Feedback: The **Diagnostic Update** group invites comments or suggestions for future topics in the newsletter. Please submit your comments to *Dr. Cornelia (Cora) Gilroy* (cgilroy@upei.ca), Diagnostic Services Laboratory, Atlantic Veterinary College, UPEI, Charlottetown, PE, C1A 4P3 and they will be forwarded appropriately.

Answer to What is Your Diagnosis on page 3: Nova Scotia Duck Tolling Retrievers (B) are prone to hypoadrenocorticism (Addison's disease)¹; this condition should always be considered in a sick dog of this breed. The other 2 breeds pictured are a Beagle (A) and Shetland Sheepdog (C).

Contributor: Dr. Shelley Burton

Reference:

1. Hughes AM, et al. Clinical features and heritability of hypoadrenocorticism in Nova Scotia Duck Tolling Retrievers: 25 cases (1994-2006). *J Am Vet Med Assoc.* 2007; 231(3): 407-412.