

THE **LEGAL SIDE**OF **VETERINARY** MEDICINE

+ EMPLOYMENT VERSUS INDEPENDENT CONTRACTOR STATUS

> + VETERINARY MALPRACTICE 101

NEXT-GENERATION PARASITE TREATMENTS BRUCELLOSIS IN IMPORTED DOGS DIAGNOSING LAMENESS IN PUPPIES ANIMAL DISASTER 911



FALL CONFERENCE & TRADE SHOW INCLUDING DENTAL WET LABS SEE PAGE 9



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COREY VAN'T HAAFF EDITOR

TO THE EDITOR Letters from members are welcome. They may be edited for length and clarity. Email us at wcveditor@gmail.com.

ON THE COVER Photo by bgwalker/istock.com

ometimes, I believe the universe conspires to lead us in one coordinated direction, such as with this issue of West Coast Veterinarian, which I fondly call "the legal issue." Frequently, Chapter members call me at the office to ask legal-type questions. There were a handful of such calls asking about employment contracts, both from employee veterinarians and from practice owners. To my editor's mind, those questions called for an article, so I reached out to a great friend of the CVMA's and the Chapter's, lawyer Douglas Jack, and he immediately agreed to write an instructive piece for us.

Then we had a question about negligence, and as luck would have it, I was attending the Canadian Animal Policy Symposium in Victoria and ran into Rebeka Breder, a lawyer who works exclusively to advance the rights and welfare of animals. She does not act for veterinarians, but she's worked on negligence cases from the other side of the table, so I thought it would be informative for Chapter members to hear her view on the issue of negligence. Her story is in this issue.

Then, in the midst of hiring a new administration and communications coordinator and progressing through our detailed and enlightening Sector Labour Market Partnerships Program survey and report, I got a call in the office from lawyers working on a BC Court of Appeal trial regarding a dangerous dog designation. That lawyer found the CVMA (and thus the Chapter's) position statement on dangerous dog legislation and asked the Chapter to consider applying for intervenor status. The Chapter was able to secure a lawyer pro bono due to the far-reaching effects of this appeal and the Chapter's standing as intervenor, and to limit Chapter expenses for disbursements to a maximum of \$750. The Chapter appeared before a judge in April and was granted intervenor status. Our job now is to help the Court of Appeal judges understand the veterinarian's role in a dangerous dog determination (without taking any position or side in the case at trial). At the chambers application I attended, there were eight lawyers representing five distinct parties, as this case may well provide some finality in directing parties on how dangerous dog designations are decided and what the potential involvement of veterinarians will be moving forward. I will keep you posted. In the meantime, have a fabulous summer and keep a lookout for registration details on our 2019 Fall Conference and Trade Show and Dental Wet Labs.

Email: wcveditor@gmail.com

Dataaff

WCVM's interviews of potential students took place at the Chapter's offices in Maple Ridge this year. The Chapter was thrilled to take on this task on behalf of its members. The Chapter's Dr. Marco Veenis was part of the WCVM's admissions committee, along with Dr. Sarah Armstrong, who attended interviews in Saskatoon. After several days in intense interviewing, the committee enjoyed a home-cooked dinner at the Chapter's executive director's home

LEFT TO RIGHT Dr. Marco Veenis, Dr. Liz Snead, Dr. Tim Mutsvangwa, and Corev Van't Haaff.



We know how hard it can be to find a locum. To make it easier, we are publishing a list of BC locum veterinarians here in West Coast Veterinarian. Inclusion in this list is a no-cost enhancement of the paid classified ads for locums available.

Please contact any of the locum veterinarians listed below, or search the classified ads for the most up-to-date list of available locums here: www.canadianveterinarians.net/sbcv/classified-ads.aspx.

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DR. JODIE WILSON 604.240.3580 jodiewilsondvm@gmail.com

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DR. ALAN NAMAZI 778.707.7008

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REBEKA BREDER, BA, JD, focuses exclusively on animal law, acting for the interests of animals in cases such as challenges to government decisions, wildlife and regulatory challenges, defending dogs, veterinary malpractice, general urban animal and wildlife matters, and condominium and pet custody disputes. She is the founder and current chair of the animal law section of the Canadian Bar Association's BC Branch and sits on the board of directors of the Vancouver Humane Society.



VINCENT DEFALQUE, DVM, Dipl. ACVD, graduated from the

University of Liège in Belgium in 2001. He currently works at North West Veterinary Dermatology Services in Vancouver, British Columbia, and St. Albert, Alberta. He is the immediate past-president of the Canadian Academy of Veterinary Dermatology.



DAVID FRASER, CM, PhD, joined UBC in 1997 as NSERC Industrial Research Chair in Animal Welfare. His work has led to many innovations in animal housing and management, from designing better pig pens to reducing highway accidents involving wildlife. He was appointed Member of the Order of Canada in 2005 for his work in animal welfare science.



GEOFF HUTCHINSON, MS, DVM, Dipl. ACVS, is the staff surgeon and a founding partner of Boundary Bay Veterinary Specialty Hospital. From southern Alberta, he received specialized surgical training and board

certification in the USA, and



2.5

started surgery departments in Arizona and New York prior to returning to western Canada in 2009 to open Boundary Bay Veterinary Specialty Hospital. Dr. Hutchinson's interests include ioint disorders and treatment. minimally invasive techniques. and fracture repair. In addition to TTA and TPLO, he brings several cutting-edge treatments to his practice including arthroscopy, laparoscopy, Kyon Zurich Cementless total hip replacement, PAUL, PGR, and fracture repair using the ALPS titanium locking plate system.

DOUGLAS C. JACK, BA, LLB, is a partner in the law firm Borden Ladner Gervais LLP, the only Canadian firm with a team dedicated to the legal aspects of veterinary practice. He is an affiliate member of the Ontario Veterinary Medical Association and the Veterinary Hospital Managers Association and a board member of the American Board of Veterinary Ophthalmology. Mr. Jack regularly speaks at veterinary conferences throughout the world.

NICOLETTE JOOSTING, BSc,

BVSc, DVM, graduated from the University of Pretoria (Onderstepoort), South Africa, in 1998. She owned Vancouver Feline Hospital and Vancouver Feline Veterinary Housecall Service. She is a member of the Animal Welfare Committee of the CVMA-SBCV Chapter and currently enjoys semiretirement in Harrison Hot Springs.

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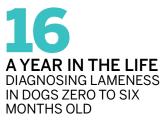




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ince writing my first report to you, the members, I have been overwhelmed by the amount of work our staff have been dealing with. Corey, our executive director, handles a variety of requests from the members and the public, works on this magazine, organizes the spring and fall CE sessions, organizes and communicates with the committees, communicates with the CVBC, handles and refers requests from the media to appropriate members or board representatives, and still has time to keep the board busy with a variety of issues. Unfortunately, we are losing our executive assistant due to family reasons, but we are pleased to have hired a replacement, Adriana Silva, as Corey definitely needs the help. Our office is dealing with so many different issues due to the increasing awareness that we exist and that we can be a valuable resource to consult.

First and foremost, thanks to all of you who responded to the survey for the Sector Labour Market Partnerships Program study of the veterinary sector of BC, the only province that has done this detailed an assessment of our industry. This is a joint project by the provincial and federal governments along with SBCV in response to what our members are telling us about difficulty in finding veterinarians to fill the needs of the public. The study is vitally important in that it will assess the needs and make recommendations about how to improve the situation. The project is on very tight timelines as the governments may need to discuss potential financial implications by the fall of this year. We all look forward to the results, which are to be presented by the end of May and will be released as soon as possible thereafter.

I attended the Manitoba Veterinary Medical Association (MVMA) meeting in early February as your representative. It is always interesting to listen to what other provincial VMAs are concerned about and what their members have to say in their discussion sessions. Of course we are quite different in BC, as the other western provinces have one body that is the regulator as well as providing member services. The other provinces also regulate technicians and have members of the technicians' association sitting on their governing boards. Thus, their members' meeting includes technicians and discussions of regulatory matters.

As in our province, the MVMA and its members are worried about a shortage of veterinarians while hearing about a possible decrease in their provincial government's financial support to the WCVM. The MVMA established a committee to gather information from its members, hold discussions with government about the value our profession brings to their province, discuss ways to attract veterinarians and retain them in Manitoba, and work with the Manitoba students to make them feel involved in their future profession and attract them back after graduation. Interestingly, the Saskatchewan representative reported that they have similar concerns about needing more veterinarians in their province. They have asked their members to write to their MLAs about the importance of continuing to fund the WCVM to maintain the college's program at the high standards it currently has.

Also, along a similar line, the MVMA has initiated a professional image public relations project under the title "There's No Substitute for a Vet." They will be releasing information via social media to enhance their professional image and ask the public to consult their veterinarian rather than going online to look for answers. It was an interesting two days in Winnipeg, and luckily the temperature warmed up to minus 20 degrees while I was there.

The other meeting I attended was the BCSPCA-sponsored Canadian Animal Policy Symposium held in Victoria. A number of members of your Animal Welfare Committee attended, as did our executive director. The

day was interesting and brought presentations about how various provinces deal with animal welfare issues and legislation. There were representatives for PEI, Saskatchewan, and our own provincial government. The president of the National Farm Animal Care Council, Jackie Wepruk, gave a wonderful talk about how the council is successful in creating codes of practice. She stressed that human needs have to be considered as well as animal needs. A collective intelligence is required for things to move forward. "Moral outrage doesn't work for the animals," she pointed out.

Another presenter, Dr. LeeAnn Forsythe from the Saskatchewan Ministry of Agriculture, talked about the importance of One Welfare being similar to One Health. She elucidated that we need to recognize the social value of animals, that is, to learn about and respect the relationship that everyone has with their animals, not forgetting to gain knowledge about indigenous people's relationships with animals. She warned us to avoid the urban-centric philosophy on animal welfare.

Lastly, and probably most importantly, we are working on developing a professional wellness and mentorship plan. This will provide a way for members to talk to a colleague about moral, ethical, or other personal issues they may be having. The intent of the program is not to replace professional assistance, but to guide members to the best help for their problems. We are aware that our profession is emotionally very draining and want to find a way to help with small problems before they become big problems. We will keep you informed about the progress with this project.

I hope everyone survived the cold this winter. Being a true west coast wimp, I certainly came to appreciate the resilience of those of you in the north who cope with the freezing temperatures and snow for more than the month that we (weak) islanders were subjected to. Hopefully you will all enjoy a good summer with no tragic fires to deal with.

Please take care and let us know if you have guestions or concerns about the direction of your CVMA-SBCV Chapter. WCV



Al Longair, BSc, DVM, graduated from the Western College of Veterinary Medicine in 1977. After graduation, he joined a mixed animal practice in Duncan, focusing on small animal practice from 1981 on. He has been involved with the BCSPCA for over 20 years, serving as the president of his local branch for 12 years and on the

provincial management committee for 10 years, with four years as president. In the early 1990s, he served as chair of the CVMA Animal Welfare Committee. He lives on a small acreage with his wife, four horses, and four dogs and coaches youth soccer in his spare time.

CVMA-SOCIETY OF BC VETERINARIANS CHAPTER **2019 FALL CONFERENCE & TRADE SHOW**

FRIDAY, NOVEMBER 1

8:00 AM - 12:00 PM 2:00 PM - 6:00 PM

DENTAL SURGICAL EXTRACTION WET LAB—THE BASICS DENTAL SURGICAL EXTRACTION WET LAB—ADVANCED WITH DR. ANGIE BEBEL, DR. CANDACE LOWE, AND DR. SUE MCTAGGART. GENEROUSLY SPONSORED BY SERONA ANIMAL HEALTH AND WCVM.

SATURDAY. NOVEMBER 2 8:00 AM - 4:30 PM CANADA.

SUNDAY, NOVEMBER 3

8:00 AM - 4:30 PM

VETERINARY DIAGNOSTICS.



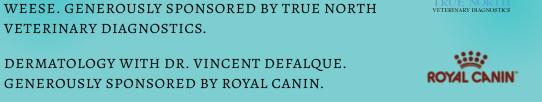
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CANNABIS—WHAT BC VETERINARIANS NEED TO KNOW WITH DR. KATHERINE KRAMER, GENEROUSLY SPONSORED BY CREATING BRIGHTER DAYS.

PATIENT-CENTRIC ANTIMICROBIAL STEWARDSHIP AND ZOONOTIC DISEASES WITH DR. J. SCOTT



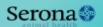














s your CVMA president, it is my pleasure to provide you with an update on some of CVMA's recent and ongoing initiatives. The 2019 WSAVA/CVMA Joint Congress takes place from July 16 to 19, 2019, in Toronto and offers 10 CE tracks per day. CVMA signature events include the Global Summit, Global Forum, Emerging Leaders Program, and AGM and Awards Ceremony. Sponsored by Virox Animal Health, the Emerging Leaders Program takes place across two half-days. The program helps veterinary staff identify and develop leadership skills while building a leadership network. Register at wsava2019.com/ registration.

In February 2019, Dr. Henry Ceelen, chair of the CVMA's National Issues Committee, presented at the Standing Committee on Agriculture and Agri-Food. He highlighted the relevance of a One Health approach and our commitment to helping the government respond to the antimicrobial resistance threat.

The CVMA submitted a letter to Health Canada in response to its open consultation on cannabis edibles, extracts, and topicals. The comments (which were originally brought forward by the CVMA in a letter to Health Canada in January 2018) included a recommendation that Part 14 of the Cannabis Regulations, "Access to Cannabis for Medical Purposes," be amended to allow veterinarians to provide necessary medication to their patients while maintaining an arms-length oversight on its dispensing, and that warning statements be included on THC-containing products (e.g., "Keep out of reach of animals").

The CFIA published amendments to the Health of Animals Regulations (Part XII) on animal transportation in February 2019. The CVMA welcomed some of the positive revisions and additions to reduce animal transportation risks. We acknowledge the complexity of the topic but feel some sections could have been improved with more discussion. Although the regulations were apparently informed by current science, the intervals for feed, water, and rest appear to have been influenced mainly by current industry practice.

Full access to the new CVMA Guidelines for Veterinary Antimicrobial Use is extended to all veterinarians until December 31, 2019. Access is available through canadianveterinarians.net.

National Tick Awareness Month in March launched TickTalkCanada.com to increase public awareness about ticks.

Contact the CVMA or consult the Member Benefits & Services section of our website for more about these and other exclusive member benefits: CVMA Petcard Program and discounted management resources from HRdownloads. WCV



Terri Chotowetz, DVM, graduated from the WCVM in 1990. She practised in Alberta in several mixed animal practices before returning to Saskatchewan in 1998 to work in a companion animal clinic in Saskatoon, where she has been for 18 years. She was elected to the Saskatchewan

Veterinary Medical Association (SVMA) in 2009 and served as president from 2011 to 2012. She sat on the SVMA's Animal Welfare Committee and served on the Animal Protection Services of Saskatchewan's board for three years. Dr. Chotowetz became the Saskatchewan representative on CVMA's Council in 2013, served as the liaison for the Animal Welfare Committee and the Canadian Veterinary Reserve, and is the CVMA representative on the WCVM Advisory Council. She spends her spare time with her husband and family at their acreage outside Saskatoon. Her four very spoiled dogs and a cat keep them busy and happy, and her only hobby—reading—is even better with a lap full of dogs.



WELCOME TO OUR NEW STUDENT LIAISON

Reina Fennell, a second-year WCVM student, was selected from four very well-qualified applicants to the position of WCVM student liaison. Reina is particularly interested in large animal medicine, having grown up in Haida Gwaii with her ducks and milk goats. She credits her upbringing surrounded by living things for her interest in and love of animals. She also loves stories and is an avid reader, making her an ideal contributor to West Coast Veterinarian magazine. Welcome, Reina; we look forward to working with you.

DR. JOHN MCCLEARY 1964-2019

For over a year, I knew the time would come when I would have to put into words what Dr. John McCleary meant to our veteri-

nary community and me. I met John over 10 years ago when we both worked at partner clinics, each of us working as a sole practitioner. I had just returned to practising after a three-year hiatus, and John was the "veteran"-an experienced, calm veterinarian who could make a splint out of a paper clip and unblock a cat in under three minutes. He was a talented clinician, surgeon, and ultrasonographer. At first I was embarrassed each time I called the clinic to discuss a case with him, but it soon became obvious that John wanted each colleague to succeed, even at the expense of his own lunch break.

We both ended up working at the same emergency clinic, and one evening I was driving home after working a shift with John. As I was heading down the highway, I saw that a truck carrying chickens had tipped over, and there were chickens crossing the highway. They were injured, and bystanders thought that I had been called down because I was a veterinarian. The first thing I did was call John at the emergency clinic to tell him what had happened. I figured John knew everything, including how to manage 50 traumatized chickens. I was right and felt immediately calmer knowing that John would gladly (grudgingly) help me if a handful of chickens showed up. And when the clinic was quiet, he could be found in the laundry room folding towels-a story that many veterinary assistants loved to share with me.

Although John taught me how to be a good clinician, he and his wife, Dr. Lesia Hyzka, taught me how to be a better friend, spouse, and parent. They met when they were both 23 years old as keen pre-veterinary students. John and Lesia graduated together from the Ontario Veterinary College in 1995, and together they managed careers and family life for over 30 years. They exemplified what it meant to be loving parents of five children, compassionate veterinarians, and excellent friends. Their children are wonderful and bright, and they love animals.

John's life came to an end after he fought brain cancer with all his might. His family decided to provide all his care at home so that he would remain comfortable and never be alone. The support Lesia and their kids showed him will forever define what "in sickness and in health" means to me. He has left us physically, but his brilliance and kindness have spread across the globe with all the new veterinarians he mentored in his almost 30 years in the profession. The animals of Victoria have lost a true advocate, and the veterinary community has lost one of its finest members.

John is survived by his soulmate and partner, Dr. Lesia Hyzka, and their five children, Connor, Brennen, Aidan, Mara, and Devin.

Provided by Dr. Jane Vermeulen

IN MEMORIAM

DR. REHANNI KHASEIPOUL: FOREVER HEALING. FOREVER MISSED

On Wednesday, July 18, 2018, heaven welcomed a new angel through its gates. Rehanni Kenna Khaseipoul passed away in a tragic motorcycle accident, leaving behind two loving daughters Jazmine and Perssia, many family and friends, and a plethora of animals whose lives she touched with her soul. Born in Uganda, Rehanni only spent a short time there before moving at the age of two to Canada, with her brothers Aynul and Enayat and her parents Shirin and Ebrahim. Their life in Canada began in Penticton, where Rehanni lived until the age of 13, after which the family chose to make Vancouver their home. After high school, Rehanni pursued her passion for healing all beings and bettering the lives of others by completing her DVM at the WCVM. After practising veterinary medicine for many years, Rehanni continued to broaden her healing and spiritual horizons, embracing, learning, and becoming devoted to homeopathy and natural remedies. Her mission in life was to heal others, whether through homeopathy, her calm therapist-like demeanour, or just her compassionate and giving nature. Many of this worldboth animal and human alike-will remember her for her dedication and curing powers.

Always gaining energy from that which surrounded her, Rehanni loved spending time in nature and socializing with friends and family. A long-time love for qigong and spiritual meditation further speaks to her passion for healing and making time to help and share her knowledge with others. As of late, Rehanni began fulfilling her bucket list, which included travelling through Europe, getting back into running, and fatefully, learning to ride a motorcycle. Like so many others, Rehanni was unable to fulfill all the items on her bucket list, but unlike so many more, was at least able to get started. There is much we can all learn from Rehanni: to look after one another, to be compassionate, to take time for healing both yourself and others, and to pursue what you love. The road will never be smooth, the path may be bumpy, and you may at times feel blind or lost, but never give up on the path forward, and always stay true to your heart; that's what Rehanni did, and it always, always served her well. If her loving family is any indication, it served her as well as it could. Dr. Rehanni Khaseipoul was truly a person worth honouring, remembering, and celebrating; the world is a better place for her having graced it. She will be forever missed, and her spirit and memory will live forever in our hearts.

Provided by Laura Crichton

FROM THE CVMA-SBCV CHAPTER WCVM STUDENT LIAISON



BRIDGES—FROM CLASSROOM TO CLINIC

BY REINA FENNELL

aturday morning: that means sitting down in one of the campus libraries with 20 unreviewed pharmacology lectures. Sigh. In the second year of veterinary school, studying becomes a daily, nightly, take-up-your-whole-weekend ritual on repeat for eight months. Second year is theory heavy

many pictures of dead things to diagnose (but hey, 9 times out of 10 it's BVD right?).

The nonstop studying reverie was interrupted when my phone buzzed. I glanced at it and saw that it was one of the clinicians at WCVM's teaching hospital. I was on call; she'd had a Holstein calf just arrive, and could I come in? "Heck, yes!" Within 60 seconds, I had scooped

> up my study materials and was biking across campus to help take care of a calf my day was suddenly looking a whole lot better.

The Large Animal Internal Medicine Student volunteer program (LAIMS) was introduced to WCVM last year by Dr. Uehlinger, one of the college's assis-

tant professors and a large animal internist. The idea was driven by two factors: a need for extra help in that department of the teaching hospital for after-hours emergencies and treatments and interest from students who wanted to be involved in the large animal clinic before their clinical training in the senior years of veterinary school. At the first meeting held to gauge how many students wanted to be involved in LAIMS, Dr. Uehlinger said she was surprised by the turnout—students from first through to third year packed the room. "I underestimated the amount of

interest students would have in this proposal," she said

PAGE 12 Some students of the LAIMS volunteer program show off the superpowers they've gained by working with large animals in the WCVM teaching hospital. **THIS PAGE** BC student Hannah Vesper and LAIMS student liaison Brennan Munro (AB) giving a teaching mare some TLC.

at the time, and continued that she hoped, should the program go ahead, it would mutually benefit both the clinicians on call and the student body at WCVM. It became quickly apparent that with so much student interest there would have to be some sort of shift schedule as well as a student liaison between the clinicians and the future LAIMS volunteers. Brennan Munro, class of 2021, stepped up to this task. For the past year, she has put together a monthly schedule for all the student shifts and facilitated communication between the clinicians and students involved in the program. When asked how she thought the program was going so far, Munro said: "For a program that started a year ago, we have come a long way. [LAIMS] has been very successful in getting students into the clinic, and there has been a lot of positive feedback from both students and interns/clinicians about the mutual benefit this program provides."

When clinicians involved were asked for feedback on the program by Dr. Uehlinger, their response was that having students, even with very limited clinic experience, available after hours was great and that students were very helpful, especially when it wasn't their first shift. They also reported that nearly all of the students have been happy to be called in and keen to learn while they were in clinic. Some students stay past the end of their shift, demonstrating an enthusiasm about being involved and an appreciation for the exposure to clinical work.

"I have the impression that some [students] sign up very often, implying that they feel it's a beneficial experience for them," said one clinician, while others said they felt that students in the lower years involved in LAIMS will be more comfortable and less stressed when they enter clinical rotations in fourth year. A student from the class of 2022 echoed this, saying that the hands-on experience and the attitude of the veterinarians and technicians they worked with was very helpful.

For me, LAIMS has been paramount in maintaining my focus and motivation during second year. I've been able to help care for febrile calves, a number of equine colic cases, and foals in ICU. I've helped with ultrasonography and workups for beef and dairy cattle internal medicine cases and learned isolation protocols. The clinical exposure has reminded me why I

"WITHIN 60 SECONDS. I HAD SCOOPED UP MY STUDY MATERIALS AND WAS BIKING ACROSS CAMPUS TO HELP TAKE CARE OF A CALF-MY DAY WAS SUDDENLY LOOKING A WHOLE LOT BETTER."

and pathology focused, and most waking hours are filled with making diagnoses off dead bits—like an obsessive hobby you wish you'd never started but now can't stop. We see live animals so infrequently we nearly forget they exist. We're told that "it will all come together" when we reach the clinical portion of our degree, and I'm sure it will, but it's hard to remember that when every Saturday presents like the one I was currently starting—with a pile of lectures to review, notes to write, and things to memorize before a Monday exam ... and of course

"IT IS THOSE OPPORTUNITIES TO BE MENTORED AND MAKE CONNECTIONS OUTSIDE THE CLASSROOM THAT **VFTFRINARY STUDFNTS REALLY CRAVE.**"

am in veterinary school and continues to push me to put 110 per cent into learning as much as I can.

Making connections with clinicians and being able to follow up with them on cases I've been involved in has also been very encouraging. Just recently, when I texted a clinician about helping watch a foal during a class break, the response I received was, "You can come if you are interested. You are always welcome to be here ... thanks so much." And honestly, that made my day. LAIMS gave me the comfort to ask questions and relationships with clinicians to reach out to. A number of my classmates involved in LAIMS have also expressed a similar sentiment. It is those opportunities to be mentored and make connections outside the classroom that veterinary students really crave. I am excited about what this program has in store for students in the future; both from a clinical learning perspective and as a networking outlet, the program bridges the gap between large or mixed animal veterinarians-to-be and clinicians.



Reina Fennell, WCVM class of 2021, grew up on an acreage on Haida Gwaii surrounded by marine and forested wilderness, which started her on her journey of getting as many experiences with different species as she could on the islands, in other parts of Canada, and abroad She completed two years of a BSc in bioveterinary science at Dalhousie

University's Faculty of Agriculture before being accepted into WCVM in 2017. After graduation, she would like to be a large animal veterinarian with a focus in equine medicine and surgery



A NATIONAL FARM ANIMAL WELFARE **SYSTEM FOR** CANADA

BY DAVID FRASER, CM, PhD

anada's National Farmed Animal Health and Welfare Council was created in 2010 to develop strategy and provide advice on all aspects of farm animal health and welfare. Early in its mandate, the council recommended 22 actions to move Canada toward a more effective and harmonized system for protecting farm animal welfare. Since then, some items have been accomplished, some are in progress, others remain unsolved, and new issues have arisen. This March, the council issued a new report with 20 recommendations. Here are some highlights.

- National codes of practice hold an ambiguous status in provincial animal protection law. Some provinces reference codes in provincial regulations, and some do not. Where they do, the wording differs from province to province, and different provinces cite different suites of codes. The National Farmed Animal Health and Welfare Council is asking the Council of Chief Veterinary Officers (CCVO)-with its strong links to provincial regulatory bodies-to explore options for achieving more uniform recognition of national codes in provincial animal protection law.
- 2 With the increase in urban and hobby-level keeping of animals, there is a need to raise awareness of animal welfare in these populations. Animal owners-even small-scale ones-should be aware of the needs of animals, biosecurity, codes of practice, responsible purchase (including online buying), and their responsibility to secure veterinary care. The council is asking provincial governments, producer organizations, scientists, and animal welfare organizations to develop and share science-based educational materials adapted for small-scale animal production and to work with municipal authorities to promote responsible animal ownership.

"ANIMAL OWNERS SHOULD BE AWARE OF THE NEEDS OF ANIMALS, BIOSECURITY, CODES OF PRACTICE, RESPONSIBLE

- 3 Recent years have seen an explosion of claims from restaurant and retail companies that they sell products from animals raised without antibiotics. Avoiding antibiotics can be commendable if it leads to better hygiene and disease prevention, but there is also a risk that animal welfare will be compromised if producers withhold antibiotics from sick animals. The report asks that standards to protect animal welfare in the production of "antibiotic-free" products be included in future revisions of codes of practice.
- We also need research into the "human dimensions" of animal welfare. We need to understand, for example, how the selection and training of staff can improve animal welfare, how producers are responding to the animal care assessment programs now being rolled out in some sectors, and how the values of the Canadian public can be taken into account in standards and policies. The council is calling on producer organizations and others that fund farm animal research to expand their funding priorities to include more work on these topics.
- With tens of thousands of independent animal producers in Canada, sharing information poses a major challenge. This is especially true now that many provincial governments have reduced their traditional efforts in agricultural extension. Some excellent educational materials on animal welfare have been created in some provinces and sectors, but these may be unavailable or unknown elsewhere. The council is asking producer and extension organizations to identify high-quality education resources on the welfare and handling of farm animals. The council will then develop a website to make these available.
- Some of the most effective measures for compliance assurance are driven by producers and their organizations. Examples include producer hotlines and programs that involve producers as part of the enforcement process. These measures could improve compliance, increase public trust, and promote self-correction within the sector, but the approaches are limited to certain jurisdictions and sectors. The National Farm Animal Care Council-which includes all the national producer organizations among its members—is being asked to identify producer-driven compliance activities used by its member organizations and encourage the extension of such programs to other sectors and jurisdictions.
- Canada's national regulations for humane slaughter apply to federally registered slaughter plants, but some provinces have different humane-slaughter regulations for provincially registered plants. We might achieve a uniform national standard if the provinces and territories were to reference the federal regulations in provincial regulations or agree on a core set of standards. The council is asking the CCVO to review and recommend options for aligning humane slaughter standards across the country.

Q

PURCHASE, AND THEIR RESPONSIBILITY TO SECURE VETERINARY CARE."

Q | There is a widespread perception that enforcement of animal transport regulations is not sufficient in parts of the country. Federal regulations are enforced by the Canadian Food Inspection Agency, and some provinces have their own regulations enforced by provincial staff. A more uniform standard might be achieved by federal-provincial agreements, like those seen in Ontario and Quebec, that allow provincial officials to contribute to enforcing federal regulations, or by referencing federal regulations in provincial and territorial regulations. Here again the CCVO is being asked to review and recommend options to achieve more effective and uniform regulation and enforcement of animal transport.

In some situations, animal welfare and human welfare services need to work together. Serious breakdown of animal care sometimes occurs when owners or staff experience health problems, mental illness, or financial or family hardship. Similarly, disasters or the killing of animals for disease control can lead to hardship for both humans and animals. Some organizations are already coordinating animal and human welfare services, but current programs tend to be specific to individual provinces or regions. The council itself is now leading a national consultation on effective ways to integrate animal welfare services with human medical and social services.

The full report "A National Farm Animal Welfare System for Canada" is available at the website of the National Farmed Animal Health and Welfare Council at: www.ahwcouncil.ca. Look under "Documents" and then "Advisory Statements and Reports."

West Coast Veterinarian is pleased to introduce a new topic for "A Year in the Life." Each four-part column is written by one veterinary specialist about one topic that has four distinct life phases. Through the course of a year, each instalment highlights how this topic affects animals at a certain life stage and what veterinarians should know about how to treat it. This year's focus is lameness.

DIAGNOSING LAMENESS IN DOGS TO SIX MONTHS OLD BY GEOFF HUTCHINSON, MS, DVM, Dipl. ACVS



harlie, a 22-week-old male intact Labrador Retriever puppy presents with a history of occasional difficulty rising from rest on slippery floors and reluctance to run and jump while playing, symptoms that were first noted two or three weeks ago. He has no known history of trauma, and the lameness is intermittent and shifting. The dog has cried out a little bit when handled and seems apprehensive about being lifted. Charlie has not eaten breakfast well over the last three days, which is unusual.

On examination, Charlie seems a little subdued but is happy to meet people and moves pretty well. He wiggles a lot and tries to play and chew when he is touched anywhere. However, Charlie seems sensitive around his elbows-the right more than the left. He is also sensitive around his hip region, although no laxity is palpable. His body temperature is at the high end of normal.

Radiographs of his right and left forelimbs and pelvis are relatively unremarkable, although there may be some increased opacity in the proximal ulna on the left side. Charlie's anconeal process seems appropriately fused on both sides, and there is no incongruity or osteoarthritis. The hip joints seem appropriately congruent, although positioning is not ideal as he is an unsedated puppy. What could Charlie's problem be?



Radiographs showing the characteristic sign of panosteitis (left) (right).

In puppies, lameness may result from numerous conditions, and history is important in determining differentials. Veterinarians should ask about the timing of onset, duration, and variability of the lameness and whether lameness is exacerbated by activity or more evident when the dog is rising from rest. Is the lameness isolated to one limb, or is it in multiple legs-or does it shift? Are there clinical signs other than the lameness? What previous treatments have been tried, and what were their effects?

The orthopedic exam should start with gait observation. A dog with mild lameness may stand with its weight shifted forward or off to one side. Leash walking can be used to assess for limping. Generally, the patient will shift weight away from the lame limb; this results in lifting the head when a lame forelimb is placed and dropping the head when a lame hindlimb is placed. Gait evaluation in young puppies can be challenging due to their small size and exuberance. Calmly greet the puppy first, then let him explore the room or pet him gently while taking the history. This gives him a chance to relax, and his reactiveness during the exam is usually diminished.

Physical examination should follow the same routine each time, so that the clinician becomes proficient at normals and all aspects are examined. Standardly, the patient is in a standing position with the examiner behind. The examiner's hands can then

"HISTORY IS IMPORTANT IN DETERMINING DIFFERENTIALS. **VETERINARIANS SHOULD ASK ABOUT THE TIMING OF ONSET. DURATION. AND VARIABILITY OF THE LAMENESS** AND WHETHER LAMENESS IS EXACERBATED BY ACTIVITY OR MORE EVIDENT WHEN THE DOG IS RISING FROM REST."

hold the patient still while feeling for asymmetry of muscle mass, joint or soft tissue swelling, joint laxity, and range of motion. To evaluate range of motion, flex and extend each joint and watch for pain or increased lameness after flexion or extension. As puppies are wiggly and react to touch everywhere, try starting at the end and side of the dog that is least suspected of being uncomfortable so that the dog becomes used to being handled and you can better assess a reaction to discomfort.

The differential diagnoses for lameness in puppies include elbow dysplasia, osteomyelitis, osteochondritis dissecans (OCD), panosteitis, hypertrophic osteodystrophy, and hip dysplasia.

Elbow dysplasia, which occurs in medium to large breeds, results from relative overload of either the coronoid or anconeal regions of the ulna. This may result in cartilage damage, medial coronoid fragmentation (FMCP), OCD of the distal humeral condyle, or failure of the anconeal process (a separate centre of ossification) to unite appropriately with the caudal ulna (UAP). Clinical signs typically start during rapid skeletal growth (four to five months of age) and consist of variable unilateral or bilateral forelimb lameness after rest or induced by exercise. Radiographs may be falsely negative in early or mild disease. Findings include increased bone density in the subchondral region of the ulna, arthritic changes over the cranial and medial ulna, indistinct coronoid silhouette on lateral radiographs, and a radiolucent line between the anconeus and ulna that persists beyond 20 weeks of age. CT scan and arthroscopy have higher sensitivity for diagnosis. Treatment typically includes conservative management or arthroscopic or open surgery to include fragment removal, fixation or removal of ununited anconeal process, or osteotomy procedures to alleviate joint incongruity or shift weight away from the medial compartment.

Hip dysplasia occurs in medium to large breeds. It results from abnormal conformation of the hip joint producing laxity of the joint and a dorsal subluxation during stance and movement. The laxity and malpositioning result in damage to the acetabular rim and articular cartilage and progressive joint degeneration. Onset of signs is typically as early as four to six months of age, and these signs manifest as hind limb lameness, exercise intolerance, guarding of the hindquarters, and narrow-based stance. Occasionally clients will note an audible click or visual shift of the hips when the dog walks. Diagnosis is by radiographic assessment of joint incongruity in VD views (sensitivity of diagnosis is enhanced by distraction techniques such as the PennHIP method) and by evidence of osteoarthritic changes. Treatment options include conservative management or surgeries including juvenile pubic symphodiesis, double or triple pelvic osteotomy, femoral head/neck ostectomy, or hip arthroplasty/replacement.

Osteomyelitis is a bacterial infection of bone. Puppies with open growth plates are at risk for physeal infections from blood-borne bacteria due to their immature immune systems and the high vascularity of this region at this age. Radiographs have a typical acute periosteal reaction but may also have regions of lytic bone. Diagnosis is confirmed by needle aspirate for cytology and culture. Hospitalization for fluid and IV antibiotic administration (avoid enrofloxacin and tetracycline) may be indicated. Antibiotics are

continued for at least two weeks or until clinical and radiograph signs indicate resolution.

Septic arthritis is a risk in puppies due to direct or hematogenous inoculation combined with their immature immune systems. Diagnosis is confirmed by cytology and culture. Treatment with antibiotics is usually successful, although open or arthroscopic joint drainage and lavage may be indicated.

Osteochondritis dissecans (OCD) is a disease manifested by a cartilage flap in the joints of developing large and giant breed dogs that occurs between 4 and 12 months of age, resulting in single- or multiple-limb lameness. The disease occurs at the bone-cartilage interface, resulting in a free flap that causes inflammation and pain. Diagnosis is typically by a radiolucent defect at the joint margin noted on radiographs. Treatment may be conservative, although open or arthroscopic flap removal and bone debridement is very rewarding.

Panosteitis is a spontaneously occurring disease of unknown etiology that occurs in large and giant breeds. It usually occurs between five months and a year of age, producing lameness that often shifts from limb to limb. Examination findings may include limited pain on direct palpation of long bones. The ulna is the most common bone affected, but any of the long bones of the forelimb or hind limb may be involved. Radiographic changes of panosteitis can often lag a few weeks behind the acute phase of pain and are characterized by circumscribed opacities within the medullary canal usually adjacent to the nutrient foramen. Over time, the medullary pattern may become trabecular, and a periosteal reaction may occur. Treatment of panosteitis is usually supportive, consisting of rest and NSAIDs. In severely affected cases that are inappetent and dehydrated, hospitalization for fluid therapy and administration of narcotics is necessary. In most cases, although episodes may be cyclic, clinical signs diminish by a year of age and prognosis for normal return of comfort and function is excellent.

The etiology of hypertrophic osteodystrophy is unknown. It occurs in young (two to six months, typically male) large and giant breeds and is characterized by soft tissue and periosteal swelling of the metaphyseal regions of long bones. Lesions are usually bilateral. Diagnosis is made by a periosteal reaction in the metaphyseal region and a characteristic "double physis" lucency in the metaphysis parallel to the physis. Treatment is analgesics and supportive care. This condition is usually self-limiting in days to months.

As for Charlie, the puppy I examined and referenced at the start of this article, the diagnosis was panosteitis.

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BY NICOLETTE JOOSTING, BSc, BVSc, DVM

e are all vulnerable to extreme weather events, such as massive fire storms, flooding, and man-made disasters. At any point in time we may be required to evacuate our homes or hunker down without power or services for days at a time. It is not just people that are affected. Animals suffer these events and need assistance through them as well. Civil emergencies require fast action and even faster thinking if rescues are to be effective.

First, some background on logistics. A civil emergency response is a collaborative effort. It starts from the ground up. The municipality is initially responsible for the local emergency response, with responders from local Emergency Support Services (ESS), firefighters, police, and BC Ambulance Service, depending on the need. If the emergency is more than a municipality can handle, the municipality can call in help where it's needed. This is when the provincial organizations and non-governmental organizations (NGOs) such as the Canadian Red Cross, Salvation Army, and Canadian Disaster Animal Response Team (CDART) come in when requested. And if the emergency is a wildfire, the BC Wildfire Service will be the command team.

Unless there is a system in place that every organization can adhere to, the response will be uncoordinated and chaotic, with duplication of effort, miscommunication, and misinformation, increasing the risk to the lives responders are trying to save. This is why all responders in BC, including CDART and the Canadian Veterinary Reserve (CVR), know and use the Incident Command System (ICS). Responders acting on their own, outside the ICS, will endanger the people and animals they are trying to rescue, will endanger their own lives, may need rescuing themselves, and could make everything more difficult and dangerous for all responders.

It took much hard work, starting in 2003, to get CDART to where it is today, a recognized and responsible animal disaster response team, but Cheryl Rogers describes how rogue animal rescuers jeopardized CDART's reputation during the 2017 wildfire response. Despite their no doubt good intentions, rescuers who falsely identified themselves as CDART responders caused havoc when they entered restricted and hazardous

"We still suffer the backlash with our relationship with ESS and the emergency response system. It means that we might not be deployed, because some trust has been lost," Rogers says.



COUNTER-CLOCKWISE CDART volunteer's view while deploying to the Gustafson wildfire in 100 Mile House; CDART volunteer assisting evacuees at the Surrey Reception Centre; CDART's facility at the Surrey Reception Centre.

The mental anguish caused by leaving pets behind is significant. Owners may refuse to evacuate because they do not want to leave their animals behind. They will post their concerns on social media, triggering not just empathy, but stress to any animal lover, some of whom will be motivated to self-deploy in a misguided attempt to help. Unfortunately, while your local emergency management may recognize the need for pet and livestock shelters, they may not recognize the need for integration within the ICS system and may let any organization come in.

The list of potential issues that CDART trains their volunteers to avoid is long. Animals may be taken without their owner's permission. They may go missing without tracking paperwork. Animals may be moved multiple times, increasing their stress. Some animals are taken too far away, making the expense of returning them to their homes prohibitive. Owners' informabasic. Especially the horses, she says. If they are fed altion may be shared inappropriately. Rescuers may refuse to return animals falfa hay, it is too rich. Volunteers need to know how to to their owners, judging without cause (or authority) that the rescuers know recognize different types of hay. better than the owners how to care for the animals. The organization may "There is a charity gap," Rogers tells me. "At the end of not have the resources or the knowledge to provide the necessary care or a response, when everyone is rebuilding, there is nothing may initiate inappropriate cruelty investigations in the midst of the disaster in place to help people replace barns and fences. Even response. with insurance, contractors are busy, and it can be diffi-"You cannot know the reasons people had to leave their animals behind. cult to get animals back home."

Don't judge them," says Rogers, who points out that what may look like cruelty may be the effect of the disaster. If CDART suspects cruelty, the organization reports it after the response, not during.

Probably the most important thing, she says, is keeping contact with the owners. The fear that one might lose a pet to an animal rescue organization adds to the stress people experience in the disaster. Reassuring them that they will get their animals back as well as making sure the animals DO go "It is a temporary sheltering service: safe space, food, water. We don't do stuff like vaccines or flea treatments." It is logistically too difficult to feed every animal a different diet, although they can do special food if medically necessary. Under stress, animals often have GI issues. The diet needs to be

back is a daily task. The emergency animal shelters are not luxurious.

"UNLESS THERE IS A SYSTEM IN PLACE THAT **EVERY ORGANIZATION CAN ADHERE TO, THE RESPONSE WILL BE** UNCOORDINATED AND CHAOTIC, WITH **DUPLICATION OF EFFORT.** MISCOMMUNICATION. AND MISINFORMATION..."





Veterinarian volunteers through the Canadian Veterinary Reserve (CVR) have yet to be deployed. Dr. Carin Wittnich, lead veterinarian of the Oceanographic Environmental Research Society and member of the CVR Advisory Board, explained some of the reasons why.

"The CVR is a national organization," she said, with emphasis on "national." Emergency responses start from the local municipal level, not at the national level. "Then there are so many levels of bureaucracy." National, provincial/territorial, and local municipal politics and their understanding of the need for a coordinated, trained animal response team can provide significant roadblocks.



Tonka wonders, "Is this place okay?" Then decides, "Yes, it is!" at the Ice Box, CDART's facility in Kamloops.



Memorandums of understanding have to be discussed with each "authority having jurisdiction," local animal welfare groups, veterinary organizations, existing NGOs, and provincial/territorial emergency management organizations. "It's going to end up being NGOs and charities picking up the ball. And unfortunately that does trigger groups to go in illegally, outside of the ICS."

The CVR training offered by the Canadian Food Inspection Agency (CFIA) involved only the tasks required for a foreign-disease outbreak. Dr. Jane Pritchard, BC's Chief Veterinary Officer, says these tasks, such as mass euthanasia, can be more humanely performed by people already appropriately trained within the food animal industry. There are a number of provincial and national actions within industry in place to support a response.

There were some problems mobilizing the CVR in a civil emergency that became apparent during the 2017 wildfire response. The CVR identified a need for large animal practitioners, but many BC veterinarians could not mobilize. They were unable to leave their practices, citing a struggle to find associate or locum veterinarians. Out-of-province veterinarians, on the other hand, were not licensed to practice in BC. Local veterinarians voiced some concern about CVR veterinarians needing to work through their facilities and how that would be supported.

"We veterinarians feel useless because we have not been used through the CVR," says Dr. Wittnich, "but it does fall on you, the individual veterinarian, to maintain preparedness. Go get the knowledge yourself, as we veterinarians always do." She adds that if disaster response medicine is something you like to do, then do get involved with local groups, such as ESS or CDART, which will get you more opportunities to deploy.

"Be honest with yourself," she advises. "It is okay if you find you are not cut out for that. The smart ones assess their own interest and suitability and availability, and if it is not for them, they leave emergency rescue as a volunteer activity and instead help out in other ways. There's no point in staying where you don't want to be. If you stay but fall apart, you become a burden to the response team."

The turmoil of a large-scale emergency response can be extremely stressful. Responders need to know how to access disaster psychosocial services and be prepared with coping mechanisms. Burnout and post-traumatic stress are things that need to be addressed.

One of the biggest differences between our CDART 2003 and 2017 responses is social media—it doesn't allow responders to stand down and rest," says Rogers, explaining that CDART is revamping its training to take this into account. As with other NGOs, such as the Canadian Red Cross, CDART tries to incorporate psychosocial support for its volunteers. "We try to debrief every night, have a long debrief when we go home, and check in with each other. You don't know how the stressor will hit you or when it will hit you. You will need to talk—find someone who understands, have a support group."

"It is not for everyone," Dr. Wittnich agrees. "It can be like controlled chaos. You have to think on your feet. It is go, go, go, long hours under difficult conditions, doing everything to care for the animals. There are no special staff to clean cages for you. You will be 'MacGyvering' things. That can be stressful for a mind that likes organization. There is plenty to get you down, like euthanizing animals you could have saved if you had more resources. It is hard to not be able to save them all. Many nights of crying. During those long days, you have to take time to walk away to breathe, rehydrate, and talk about other things to get your brain back."

"But it is worth it," she continues. "There is nothing like saving a life in the midst of all the chaos, mud, and blood. All the fight is worthwhile." Dr. Wittnich recalls a few special moments such as the dog saved from heatstroke, or cleaning a dog from the gunk of a flood. "It's the moment we made a difference."

For CDART's Cheryl Rogers, when she is not coordinating the response, her favourite task is "search and response." That entails entering evacuated areas (with permission) to find, trap, or feed and water the animals left behind. "We do it because we are crazy animal lovers, passionate about what we do." She tells me a story—one of many from the 2017 wildfires. The family had evacuated, leaving some guppies behind. The CDART team found the guppies safe. The ecstatic owner posted on social media, at which point CDART found themselves inundated with requests. "People do not realize we are an all-species organization, so exotic pet owners are often unaware we can help. Once that got out, we had requests from people about their snakes, koi, sugar gliders." That someone cares, in a disaster response, to feed and water the animal left behind, or to provide a safe space for their animals, has an immense social impact, she says. "When you reunite people with their animals—it is amazing. Emotional."

A civil emergency animal response is not veterinary in nature. Providing emergency veterinary care is only a part of the work the team needs to be able to do. The team must provide shelter, food, and water appropriate to the species. They assist in evacuation as well as search and response. Animals must be identified, linked with their owners, tracked, and then returned home. CDART volunteers have basic pet first aid training, but beyond this, they work with local veterinarians.

Rogers speaks highly of the veterinarians who have worked with CDART during emergency responses. "They are awesome," she said. "We worked with many veterinarians during the 2017 wildfire responses. They just step up to help." Local veterinary associations and individuals can advocate for veterinary involvement at the emergency planning level. To do this, according to Dr. Wittnich, we need to be definite about the health and welfare issues that a veterinarian can mitigate that can be integrated into the planning.

"It would be nice to have a veterinarian on the board of CDART." Cheryl Rogers continues with her future goals for CDART, "I would like to see CDART develop standards for emergency animal care. Ideally, we would like to have one to three properly trained volunteers in every community." There are approximately 100 CDART volunteers, but only about half of those will be able to deploy. "We had many who did not deploy because they were worried about their own animals if a fire broke out close to their home. Also, not many have the experience and the desire to command. The training and experience has to go deep enough and be focused on disaster response, not animal cruelty and welfare."

That training, along with tracking and coordinating volunteers so that they are ready to respond, is expensive to provide. The CVMA-SBCV Chapter did provide a \$10,000 donation in 2018 to CDART to assist with training. "Donate money, not food." Rogers is quite adamant about this. "We have the equipment; we don't need food, but we do need money—to pay veterinary bills, to train and support volunteers, and to transport volunteers. There are a lot of expenses involved in a response."



"YOU CANNOT KNOW THE REASONS PEOPLE HAD TO LEAVE THEIR ANIMALS BEHIND. DON'T JUDGE THEM."



LEFT Kittens hanging out in their hammock at the Ice Box, CDART's facility in Kamloops. **RIGHT** Helicopter overhead while CDART volunteers are on SAR in Clinton, responding to the Elephant Hill wildfire.



EMPLOYMENT VERSUS **INDEPENDENT CONTRACTOR STATUS BY DOUGLAS C. JACK, BA, LLB**

he veterinary profession continues to be plagued by the uncertainty arising from a general misunderstanding of the difference between the legal status of employees and that of independent contractors. A failure to understand and properly document the nature of the preferred relationship for your practice can lead to significantly compromising unintended consequences including income tax reassessments and lack of access to some legal advantages arising from the termination of the **RELATIONSHIP...**" engagement. As such, it is prudent for both the practice owner and the engaged veterinarian to have a clear understanding of the legal tests that will be applied to define the relationship and to appropriately document their relationship in a written agreement

"IT IS PRUDENT FOR BOTH THE PRACTICE OWNER AND THE ENGAGED VETERINARIAN TO HAVE A CLEAR UNDERSTANDING OF THE LEGAL **TESTS THAT WILL BE APPLIED TO DEFINE THE**

"WHEN CONFUSION ARISES FROM A FAILURE OF THE APPLICABLE TESTS, THE CONSEQUENCES CAN BE SIGNIFICANT."



THE TESTS

There are four principle tests that the Supreme Court of Canada has identified for determining the legal relationship between a clinic and its professional staff. The courts have consistently found that merely using the word "employee" or "contractor" is not particularly relevant to a finding of the true nature of the engagement; instead, the results of these tests will determine the foundation of the relationship.

THE TEST OF CONTROL

An employer controls the activities of an employee—this would include giving direction on the hours of work, the work schedule, the nature of cases to be undertaken, when vacation time can be scheduled, and even the nature of work clothing. Independent contractors, on the other hand, have the freedom to set their own schedule and work "independently" using their own professional judgment. Importantly, contractors are generally not limited to providing services to a single clinic. So long as the consulting services mandate is not in conflict with another engagement at another clinic, the contractor is at liberty to provide services in as many clinics as can be accommodated at the same time. In most cases, contractors engaged as "locums" will fulfill that role for a fixed, short-term period, while employees would be engaged for indefinite or longer-term engagements.

THE TEST OF MANNER AND CONSISTENCY OF PAYMENT

Employees provide service to the clinic in exchange for compensation in the form of a salary or wage which is typically paid out biweekly and subject to usual statutory deductions for employment insurance, income tax remittances, and Canada Pension Plan contributions. Contractors are compensated in a decidedly different manner through issuing an invoice (very often monthly) for the agreed-upon consulting fee together with any applicable GST or HST. The contractor then has the obligation to remit their own income tax payments on a quarterly basis along with accounting for any accrued GST or HST after setting off any input tax credits. As an independent contractor, a practitioner can deduct any business expenses incurred for the purpose of earning a profit, whereas an employed practitioner is limited to the single "basic exemption" for tax purposes.

THE TEST OF OWNERSHIP OF TOOLS AND EQUIPMENT

An employer is required to provide the employee with all of the necessary veterinary tools and equipment needed to perform the work in accordance with the job commitment; an independent contractor would provide all of their own tools and equipment.



THE TEST OF RISK OF PROFIT AND LOSS

As an entrepreneur, the independent contractor assumes all of the risk associated with making a profit in their contractual engagements—typically, "the more one works, the more one gets paid." This is unlike an employee, who provides service based upon the hourly wage or salary agreed upon; that is, an employee is legally entitled to be paid regardless of the financial well-being of the clinic and is not personally at risk for any losses in the clinic (although a clinic in financial trouble does present the risk of non-payment to any party). Note that this test does not restrict the clinic owner from paying a "bonus" to an employee based upon a profit-sharing plan—the test is clearly a two-edged test and must consider the relationship in the context of both profits and losses.

THE CONFUSION

With these key tests in mind, we can quickly see that often the results of the tests do not provide uniform outcomes: for instance, an independent contractor may be working in circumstances where the practice owner wants to apply a great deal of control over the terms of the work (particularly as it applies to the work schedule and demanding exclusive service to a single clinic). Most contractors simply do not own sufficient veterinary equipment to bring to the engagement; thus, that test is compromised. Also, the agreements documenting the relationship often use language that is inappropriate for the intended nature of the relationship. For example, "leaves of absence" for contractors may be referred to as "vacations" or "consulting fees" as "salary."

THE CONSEQUENCES

When confusion arises from a failure of the applicable tests, the consequences can be significant. Very often these issues arise in the context of the termination of the relationship—contractors may apply for employment insurance benefits that they are not entitled to, or they may erroneously believe that they can commence lawsuits for wrongful dismissal based upon not having received the reasonable notice that an employee would be entitled to. Arguably, the most significant risk is that an audit of the payroll records of the clinic can give rise to a challenge of the nature of the relationship and a finding that the veterinarian engaged as an independent contractor is, in fact, an employee. This could result in demands for the payment of arrears of income tax remittances (together with interest and penalties) and a disallowance of business expenses claimed by the would-be contractor.

PRACTICE AVOIDANCE STRATEGY

One of the best strategies to employ for both the practice owner and the veterinarian engaged to provide professional services is to appropriately document the intended relationship in a written agreement. An associate veterinarian should have a written Employment Agreement, while an independent contractor should have a Consulting Agreement or Contractor Agreement. The content of each of these agreements would simply reflect compliance with the tests referred to herein using the appropriate terminology to reinforce the intention of the parties. For instance, the Consulting Agreement for an independent contractor would contain a provision clearly indicating that the parties intended that status and did not intend any other relationship including employment, partnership, or a joint venture. Further, the Consulting Agreement would refer to the compensation as a "consulting fee" and provide for the payment and remittance of GST or HST, and it would refer to "leaves of absence" and not "vacations." Importantly, the Consulting Agreement would ensure that the contractor is at liberty to participate in other engagements that do no conflict with the services commitment they have contracted for.

Through an appropriately drafted contract, each of the parties can enjoy the comfort that comes with a greater degree of certainty that the tests will be met and the compromising consequences can be avoided.

VETERINARY MALPRACTICE 101

BY REBEKA BREDER, BA, JD

WHAT IS A VETERINARY MALPRACTICE CLAIM?

hen someone sues a veterinarian, it is generally not about money. Veterinarians, or insurers who act on their behalf, cannot expect to settle a claim by simply throwing some money at a plaintiff. An increasing number of people consider their pets family. Whether this is because of a growing number of empty nesters or of people without children of any age is uncertain. However, what is clear is that people unconditionally love their dogs and cats, and will do whatever it takes to correct what they see as a wrong done to their companion animal.

In actions arising from injury or death of an animal, the types of claims asserted against veterinarians are usually in negligence and breach of contract. For a negligence claim, just as in a human medical malpractice claim, a plaintiff suing a veterinarian must establish that: (a) the veterinarian, through act or omission, failed to give the standard of care that a reasonable veterinarian would give in similar circumstances; (b) the veterinarian's breach of the standard of care (or negligence) caused the plaintiff's/animal's injuries; and (c) as a result thereof, the plaintiff suffered damages.

In a breach of contract claim against a veterinarian, the contract at issue is for the provision of veterinary services—specifically, that these services will be performed according to a standard of care that is in accordance with the conduct of a prudent and diligent veterinarian in similar circumstances. A breach of the standard of care is a fundamental breach of the contract. The plaintiff also needs to establish that this breach caused the plaintiff's loss or damage. The ability to prove foreseeability of this damage is especially important in a breach of contract claim against a veterinarian.

DAMAGES

A gross misconception is that companion animals are not worth much, if anything, financially. To date, veterinarians have enjoyed relatively low insurance premiums, mainly because damage awards for the loss of companion animals as a result of professional negligence have been non-existent or very low. And the monies that have been paid out by insurers are usually as a result of settlements, instead of damage awards by courts. This will likely change in Canada, as it is already happening in the United States. In the last few years, as the field of animal law has grown significantly in Canada, courts are recognizing the interests of animals. It is only a matter of time before courts hear an increasing number of veterinary malpractice claims instead of these issues being taken care of behind closed doors.

When people sue, they are often driven by emotions and by a sense of justice. They are not seeking simple compensation for the veterinary fees they incurred; rather, people are ultimately seeking some form of relief for mental distress or loss of companionship.

The fundamental principle on which damages are awarded at common law is that the injured party is to be restored to the position—and not just the financial position—in which the party would have been had the actionable wrong not taken place. Anguish and distress have been long recognized in the law of negligence and in breach of contract cases (so long as the loss was foreseeable).

The law around "anguish and distress" or "mental distress" is important in the context of veterinary malpractice lawsuits because this provides an avenue for the courts to make damage awards that are significantly higher than the market value of the companion animal, which would otherwise be nominal.

Technically, the law considers animals to be property. There are no cases in Canada (yet), in which courts have awarded damages for mental distress or for loss of companionship against veterinarians. This is likely because (a) these types of damages have not been claimed at all, HOWEVER, COURTS ARE INCREASINGLY RECOGNIZING THAT COMPANION ANIMALS ARE A SPECIAL TYPE OF 'PROPERTY,' AND THAT THEY OCCUPY A SPECIAL PLACE SOMEWHERE IN BETWEEN A PERSON AND A PIECE OF PERSONAL PROPERTY.

and (b) veterinary cases have traditionally not proceeded to the trial stage and have often been settled out of court.

However, courts are increasingly recognizing that companion animals are a special type of "property," and that they occupy a special place somewhere in between a person and a piece of personal property. As such, this important principle will change the legal landscape for veterinary malpractice claims.

Canadian courts (outside of British Columbia) have already made awards for loss of animal companionship, including in the following circumstances: loss of a dog as a result of an attack from another dog (approximately \$30,000), loss of a dog as a result of negligent boarding (approximately \$6,000), and anguish and distress over the possible amputation of a cat's tail (\$600). Although none of these cases have been in the context of veterinary malpractice, they are indicative of the way courts are beginning to view the importance of companion animals in family homes. Surely, if people are awarded significant sums of money for being disappointed in their vacations, and for similar intangibles, it is conceivable, and quite likely, that we will see significant damage awards for injury to or loss of companion animals as a result of veterinary negligence.

WHAT TO EXPECT IF YOU ARE SUED

In British Columbia, plaintiffs have a choice to sue in either Small Claims or Supreme Court. Small Claims actions involve a claim worth \$35,000 or less.

The Small Claims process is generally more user friendly, faster, and less expensive. There are far fewer procedural steps required, and the rules of evidence are generally more relaxed. If a veterinarian is sued in Small Claims, their defence must be filed within 14 days of when they were served with the lawsuit. The plaintiff (or claimant as it is referred to at that level of court) then has the choice of filing a reply to the defence. The case then proceeds to a settlement conference or mediation within three or four months. If the case is not settled at that point, the matter is referred to trial within the next six or more months. There are no examinations for discovery or other discovery procedures. Overall, it takes about one year, or slightly longer, for a Small Claims action to be resolved.

By comparison, a Supreme Court action can take approximately five years or longer to be resolved. The Civil Rules of Court set out the procedures to follow, and the rules of evidence are far more strict than in Small Claims. Once a veterinarian is sued, they have 21 days (assuming the veterinarian lives in British Columbia) to file a defence. The plaintiff then has seven days to file a reply to the defence. The parties then proceed to exchange documents, after which examinations for discovery are held. Discoveries are essentially interviews

VETERINARIANS SHOULD **REVIEW THEIR NOTES FOR** SUCH ADVICE OR WRITE DOWN WHAT THEY RECALL FROM THIS TYPE OF DISCUSSION AT THE BEGINNING OF THE LAWSUIT; OTHERWISE, THE **VETERINARIAN RISKS LOSING** THEIR DEFENCE FOR THIS ALLEGATION.

conducted under oath and are used to obtain admissions and discredit witnesses at trial. There are usually multiple court applications made during the lawsuit. If the matter is not settled, the only resolution to the dispute is trial.

One of the main advantages of a Small Claims action is that it is generally faster and less expensive for both parties. The losing party also does not have to pay the winning party's legal costs, although disbursements (such as expert reports) may be awarded to the winning party. The major disadvantage of Small Claims, and the corresponding benefit of a Supreme Court action, is that the Small Claims Court does not have inherent jurisdiction. This means that the Court is limited in what it can award both legally and in dollar amount.

ISSUES THAT ARISE

PUBLIC INFORMATION

One of the issues that always arises is that once a lawsuit is filed (regardless of the level of court), all documents that are filed therein are open to the public. This can be very intimidating and potentially embarrassing for a veterinarian, whose reputation is of the utmost importance. This is what sometimes ultimately motivates veterinarians to settle a case even if they believe they did no wrong.

EXPERTS

Obtaining a credible expert report is key to both the prosecution and defence of a veterinary malpractice claim. It is generally much harder for a plaintiff to obtain one in the same province as where the incident occurred, as veterinary experts may not want to testify against a colleague.

The purpose of the plaintiff obtaining an expert report is to establish, through expert testimony, what is the appropriate standard of care and that the defendant's breach of that standard caused the animal's

HOW TO AVOID A LAWSUIT

BE HUMAN

One of the key ways of avoiding a lawsuit is to remain human. Do not act as if you know it all and get defensive if the client hints that something may have gone wrong with the medical care given. Maintain an open and honest dialogue. Show compassion and empathy. Client service is of utmost importance, especially during what is an emotional time for the client.

APOLOGIZE

If something indeed went wrong, many veterinarians believe they are not allowed to apologize. Whether it's fear of insurance coverage being denied or perhaps some egotistical reasons, apologies are rarely given. And this is wrong.

The client will likely be appeased if the veterinarian offers a genuine apology. Veterinarians would likely be surprised if they knew the number of times plaintiffs wished to have received a simple apology and acknowledgement of a mistake.

Veterinarians should not fear apologizing, especially in British Columbia, which has had an Apology Act since 2006. Under this act, an apology does not constitute an admission of fault or liability, nor does it affect any insurance coverage that is available or that would be

Another common issue is that of informed consent. Plaintiffs can claim that the veterinarian did not fully and properly inform the plaintiff of the various types of treatment and care available and/or that the veterinarian did not fully or properly inform the plaintiff of the associated risks (even if they are remote). As a result, the plaintiff's consent to the treatment was not an "informed consent," and the veterinarian committed an act (or omission) of negligence. Veterinarians should review their notes for such advice or write down what they recall from this type of discussion at the beginning of the lawsuit; otherwise, the veterinarian risks losing their defence for this allegation.

Veterinarians should remember that they are at risk of being sued just like any other professional. However, unlike other professions, the potential financial loss has not been significant to date because companion animals have been considered as having nominal value. Given that animal law is developing in Canada, it is only a matter of time before veterinarians will be exposed to much higher financial risks as a result of damage awards that may be made against them. That said, those veterinarians who genuinely care about both their human and animal patients should have less to worry about so long as they maintain a good client service relationship with their clients.

injury or death. The purpose of the defence expert report is to refute and poke holes in the plaintiff's expert opinion.

CONTRIBUTORY NEGLIGENCE

Contributory negligence is a defence for a veterinarian. As the facts develop throughout the case, it sometimes becomes evident that the plaintiff contributed to the damage or loss of the pet's injury, usually by ignoring the veterinarian's advice for aftercare. Although this may not absolve the veterinarian fully, this defence can apportion the amount of damages awarded between the plaintiff and defendant.

INFORMED CONSENT

available but for the apology. In essence, the Apology Act allows veterinarians (and other professionals) to apologize without fear of being blamed for fault or denied insurance coverage.

KEEP GOOD NOTES

Another way to avoid a lawsuit—or at least ensure a solid defence—is by taking good and legible records. Although it is not necessary to note every detail, the more comprehensive the medical notes, the easier it will be for veterinarians to defend themselves.

GET INFORMED CONSENT

Despite the veterinarian's belief of the client's knowledge of their companion animal, alternative treatment procedures and associated risks should be discussed-no matter how trivial a procedure it is (such as neutering). Veterinarians want to ensure that their clients are fully informed.

The information contained herein is not legal advice and should not be relied upon as such. This article is for interest only.

NEXT-GENERATION PRODUCTS FOR THE **TREATMENT OF PARASITES IN COMPANION ANIMALS**

INTRODUCTION We all have patients that we will always remember. This is certainly the case with two dogs named Berlioz and Kenny. They live thousands of kilometres apart and are different ages and breeds, but both were suffering from a skin condition that has historically been difficult and frustrating to treat: canine demodicosis. I met Berlioz, a neutered male Cocker Spaniel with adult-onset relapsing

pedal demodicosis, when I was practising in Brossard, Quebec, a few years ago. He was being treated by an internal medicine specialist for Cushing's disease. Despite laboratory test results showing good control of the underlying condition, the pododemodicosis nonetheless kept relapsing within a month of stopping oral ivermectin treatment. I reluctantly recommended chronic "pulse" therapy to try to keep the demodicosis under control. Then one day, the internist asked me what I thought about prescribing an oral isoxazoline instead of ivermectin. Afoxolaner and fluralaner tablets had become available in Canada just a few months before this conversation. I must admit I was skeptical about the idea that a single dose of an oral medication could lead to parasitological and clinical cures, when it usually took an average of 10 weeks of daily oral ivermectin to achieve remission. There was not much scientific evidence for

BY VINCENT DEFALQUE, DVM, Dipl. ACVD

"I MUST ADMIT I WAS SKEPTICAL ABOUT THE IDEA THAT A SINGLE DOSE OF AN **ORAL MEDICATION COULD** LEAD TO PARASITOLOGICAL AND CLINICAL CURES..."

Figure 1: Day 0 (single dose of oral fluralaner).

"SINCE 2015, ISOXAZOLINES HAVE SHOWN IMPRESSIVE RESULTS IN CONTROLLING CANINE DEMODICOSIS, AND THEY ARE LIKELY TO BE THE MAINSTAY THERAPY FOR MANY YEARS TO COME. I KNOW I NEVER LOOKED BACK."

Figure 2: Day 44.

the efficacy of isoxazolines for extra-label use in dogs at that time. Because I was leaving my position, I was also concerned that I could not follow up on my patient appropriately. I left Quebec to move back to British Columbia in the summer of 2015, wondering if Berlioz could have benefited from this proposed alternative treatment.

In September of the same year, we opened a specialty dermatology referral practice on Kootenay Street in Vancouver. Enter my new patient: Kenny, a six-month-old intact male Australian Shepherd. His demodicosis lesions were predominantly facial. He also had a severe secondary bacterial pyoderma caused by methicillin-resistant Staphylococcus pseudintermedius. The pyoderma was making this puppy so itchy that he needed to wear an Elizabethan collar 24/7. Considering the age, but most importantly the breed of the patient (a well-known ivermectin-sensitive breed), I decided this was a great opportunity to treat my first case of canine demodicosis with oral fluralaner. When I saw Kenny for subsequent rechecks, I was astonished. It worked, and it was well tolerated. The before and after photos in figures 1 and 2 show Kenny's astonishing recovery.

Was it finally possible to relegate the use of titrated ivermectin and its occasional but alarming adverse effects? Were isoxazolines truly going to be game changers for the extra-label treatment of canine demodicosis? Could they be used for other canine and feline ectoparasites as well? The answer to the questions above is YES.

Since 2015, isoxazolines have shown impressive results in controlling canine demodicosis, and they are likely to be the mainstay therapy for many years to come. I know I never looked back. The bottle of ivermectin we bought when we opened the Vancouver practice ended up expiring in the back of a shelf.

ISOXAZOLINES: WHAT IS THIS NEW CLASS OF DRUGS?

Flea and tick infestation is a major health problem in dogs and cats. Recent advances in product technology have greatly expanded the available options for veterinarians and pet owners. However, this wide array of available parasiticides can lead to confusion. Afoxolaner, fluralaner, lotilaner, and sarolaner are novel synthetic members of the isoxazoline class of parasiticides that show activity against insects and acarines, including fleas and ticks.

WHICH PRODUCTS ARE CURRENTLY AVAILABLE IN CANADA?

There are two types of products available in Canada:

- 1. Products that contain an isoxazoline alone. These are currently only labelled for the treatment and prevention/control of fleas and ticks in Canada. Four oral products are commercially available for oral administration in dogs:
 - a. Afoxolaner (NexGard, Boehringer Ingelheim Canada)
 - b. Fluralaner (Bravecto, Merck Animal Health)
- c. Lotilaner (Credelio, Elanco Canada)
- d. Sarolaner (Simparica, Zoetis Canada)

Fluralaner is also available as a spot-on treatment (Bravecto Topical Solution, Merck Animal Health) for dogs or cats.

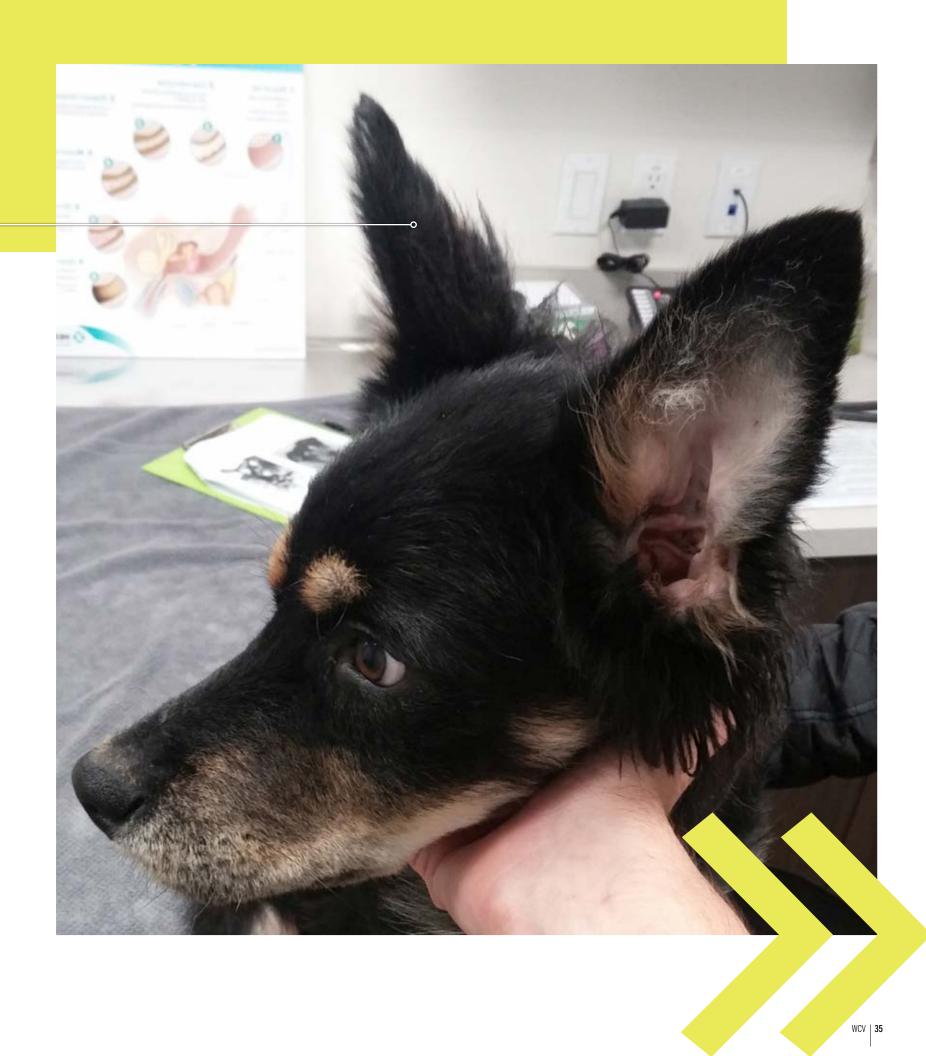
2. Combination products. Two such products have more recently been launched in Canada. They are labelled for the treatment and prevention/control of fleas and ticks, as well as other important endo- and ectoparasites. The oral combination of afoxolaner and milbemycin oxime (NexGard Spectra, Boehringer Ingelheim Canada) covers fleas, ticks, heartworms, and intestinal worms (roundworms, hookworms, and whipworms) in dogs. The topical combination of sarolaner and selamectin (Revolution Plus, Zoetis Canada) covers fleas, ticks, ear mites, heartworms, and intestinal worms (roundworms and hookworms) in cats.

WHAT IS THE MECHANISM OF ACTION OF THESE DRUGS?

Isoxazolines have a novel mode of action and specifically block arthropod ligand-gated chloride channels. They act on the gamma-aminobutyric acid receptor (GABA) and glutamate receptors, inhibiting GABA and glutamate-regulated uptake of chloride ions resulting in excess neuronal stimulation and rapid parasite death.

WHAT IS THE MAIN DISADVANTAGE OF THESE DRUGS?

The main disadvantage of isoxazolines is that fleas and ticks must attach to the host and start feeding in order to be exposed to the active substance.





"THE PYODERMA WAS MAKING THIS PUPPY SO ITCHY THAT HE NEEDED TO WEAR AN ELIZABETHAN COLLAR 24/7. CONSIDERING THE AGE, BUT MOST IMPORTANTLY THE BREED OF THE PATIENT (A WELL-KNOWN IVERMECTIN-SENSITIVE BREED), I DECIDED THIS WAS A GREAT OPPORTUNITY TO TREAT MY FIRST CASE OF CANINE DEMODICOSIS WITH ORAL FLURALANER."

WHAT ARE THE ADVANTAGES OF THESE DRUGS?

Several criteria are judged important for both veterinarians and pet owners: spectrum of action, duration of efficacy, ease of use, safety, and speed of kill. The four major advantages of isoxazolines are the following:

1. Wide spectrum of action and long duration of efficacy.

Due to their pharmacokinetic properties, isoxazolines were the first and are currently the only orally administered drugs to provide effective and long-lasting (for a month or more) parasiticidal activity against both fleas and ticks after a single administration.

2. Easy to use.

Oral isoxazolines are easy to administer and palatable. This enhances pet owner compliance. They are the therapeutic option of choice in dogs that are bathed or swim frequently.

3. Good safety profile.

Isoxazolines are not substrates of the P-glycoprotein. These products are generally quite safe for most pets. The most frequently reported adverse effects include vomiting, diarrhea, anorexia, lethargy, and flatulence. Seizures, tremors, and ataxia have also been reported. 4. Great speed of kill.

Speed of kill is also an important criterion for assessing a flea control product, because the more quickly fleas are killed, the less likely a pet owner is to observe them on the pet. It also influences flea egg production, as a faster kill results in less flea egg contamination of the environment. Isoxazolines kill over 95 per cent of the fleas, starting as early as four to eight hours.

HOW ABOUT THE EXTRA-LABEL USE OF THESE DRUGS IN CANADA? Do they work on other mites, and on lice?

The results of recently published studies (summarized in table 1) are encouraging because this new treatment modality offers the potential to provide effective and safe control of many ectoparasitic diseases of companion animals, with low frequency of administration, while helping prevent and control fleas and ticks.

TABLE 1: Extra-label use of isoxazolines in Canada. Full references are available upon request.

TADLE 1. Extra-label use of isoxazonnes in Ganada. Fun references are available upon request.						
	PARASITIC DISEASE (PARASITE SPECIES)	JOURNAL AND YEAR OF PUBLICATION	FIRST AUTHOR'S LAST NAME	ACTIVE INGREDIENT(S) AND Mode of Administration	TREATMENT PROTOCOL	TREATMENT OUTCOME
	CANINE SUCKING LICE INFESTATION (LINOGNATHUS SETOSUS)	Parasites and Vectors 2017	Kohler-Aanesen	Oral fluralaner	Single dose	100% lice free at day 28
	FELINE EAR MITE INFESTATION (OTODECTES CYNOTIS)	Parasites and Vectors 2017	Taenzler	Topical fluralaner	Single dose	99.8% mite reduction at day 28
	CANINE EAR MITE INFESTATION	Parasites and Vectors 2016	Carithers	Oral afoxolaner	Single dose	98.5% mite reduction at day 28
	(OTODECTES CYNOTIS)	Parasites and Vectors 2017	Taenzler	Oral fluralaner	Single dose	100% mite free at day 28
		Veterinary Parasitology 2016	Six	Oral sarolaner	Single dose or two doses 30 days apart	98.2% mite reduction at day 30; 99.5% mite reduction at day 60
		Veterinary Dermatology 2018	Becskei	Oral sarolaner	Single dose or two doses 30 days apart	93.3% mite reduction at day 60
		Parasite 2016	Beugnet	Oral afoxolaner	Two doses 28 days apart	100% mite free at day 28
	(SARCOPTES SCABIEI)	Parasite 2018	Hampel	Oral afoxolaner or afoxolaner-milbemycin oxime	Two doses 30 days apart	99.7%–100% mite free at day 60
		Parasites and Vectors 2016	Taenzler	Oral or topical fluralaner	Single dose	100% mite free at day 28
		Veterinary Dermatology 2016	Romero	Oral fluralaner	Single dose	100% mite free at day 14
		Veterinary Parasitology 2016 (laboratory study)	Becskei	Oral sarolaner	Two doses 30 days apart	98% mite free at day 44
		Veterinary Parasitology 2016 (field study)	Becskei	Oral sarolaner	Two doses 30 days apart	100% mite free at day 60
	FELINE DEMODICOSIS (DEMODEX GATOI)	Veterinary Dermatology 2018	Duangkaew	Oral fluralaner	Single dose	Negative skin scrapings at one, two, and three months
	FELINE DEMODICOSIS (DEMODEX CATI)	Journal of Small Animal Practice 2017	Matricoti	Oral fluralaner	Single dose	Negative skin scrapings at one and two months
	CANINE DEMODICOSIS (DEMODEX INJAI)	Proceedings of the SEVC 2017	Benito	Oral fluralaner	Single dose	100% mite free at day 49
	CANINE DEMODICOSIS (DEMODEX CANIS)	Parasite 2016	Beugnet	Oral afoxolaner	Three doses 14 days apart and a fourth dose 28 days later	87.5% mite free at day 84
		International Journal of Applied Research in Veterinary Medicine 2016	Chávez	Oral afoxolaner	Three doses 28 days apart	100% mite free at day 56
		Proceedings of the NAVDF 2018	Murayama	Oral afoxolaner- milbemycin oxime	Three doses 28 days apart	100% mite free at day 84
		Japanese Journal of Veterinary Dermatology 2018	lijima	Oral afoxolaner	One, two, or three doses 21, 28, 35, or 42 days apart	100% mite free at day 77
		Parasites and Vectors 2018	Lebon	Oral afoxolaner or afoxolaner- milbemycin oxime	Three doses 28 days apart	98% mite reduction at day 84
		Parasites and Vectors 2015	Fourie	Oral fluralaner	Single dose	100% mite free at day 56
		Proceedings of the WCVD8 2016	Arias	Oral fluralaner	Two doses 60 days apart	98% mite reduction at day 84
		Proceedings of the European Veterinary Dermatology Congress 2015	Karas-Tecza	Oral fluralaner	Two doses 90 days apart	100% mite free at day 84
		Veterinary Dermatology 2018	Duangkaew	Oral fluralaner	One to three doses 84 days apart	100% mite free at day 84
		Parasites and Vectors 2017	Snyder	Oral lotilaner	Three doses 28 days apart	100% mite free at day 70
		Veterinary Parasitology 2016	Six	Oral sarolaner	Three doses 30 days apart	100% mite free at day 42
		Veterinary Dermatology 2018	Becskei	Oral sarolaner	Two to six doses 30 days apart	100% mite free at day 150



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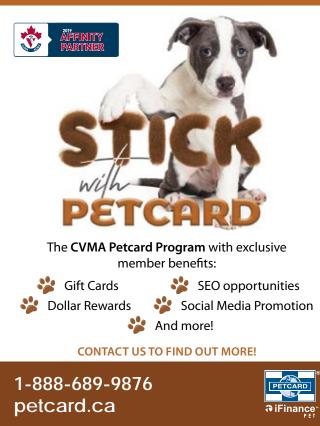
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BRUCELLOSIS **IN IMPORTED DOGS**

BY ERIN FRASER, BSc, MSc, DVM, AND BRIAN RADKE, PhD, DVM

he recent spate of media reports¹ about people importing dogs that are infected with Brucella canis from far-flung places is concerning for several reasons. Firstly, canine brucellosis is transmissible to other dogs and can be difficult to detect and treat. In addition, B. canis can be transmitted to people. Although this is rare, there are several reports of B. canis infections in humans, including a case of a three-year-old girl in New York² and an outbreak in Michigan.³ Children, pregnant women, and elderly and immunosuppressed people may be at higher risk of infection if they are exposed to infected tissues or fluids.

BC had its first recorded human B. canis infection⁴ in late 2018. The infected person transported rescue dogs coming from Mexico and the US into BC, including a pregnant bitch that spontaneously aborted during transport and was subsequently confirmed to be infected with B. canis. Typically zero to two cases of human brucellosis (usually Brucella melitensis) are reported annually in BC; these infections are usually acquired in countries where the disease is endemic via contact with ruminants or consumption of unpasteurized milk.

Four canine cases of Brucella canis were documented in BC in 2017-2018, all in imported dogs. However, the incidence of canine brucellosis is likely underestimated due to underdiagnosis and the disease not currently being reportable in BC. Dogs are imported into Canada for personal, commercial, and compassionate reasons. There are approximately 150 rescue organizations operating in BC, many of which are involved in importing dogs from outside of Canada. While the number of dogs annually imported into BC is unknown, there are indications it is significantly increasing.

Symptoms of B. canis infection may be subclinical, or they include midto late-stage abortions, diskospondylitis, lameness, or epididymitis and prostatitis in male dogs. Diagnosis can be difficult, and several methods may be required to confirm B. canis. Early-stage infections are much

¹www.cbc.ca/news/canada/kitchener-waterloo/

brucellosis-dogs-infection-bacteria-ontario-puppy-breeders-1.5051751 ² www.ncbi.nlm.nih.gov/pmc/articles/PMC4639931/

³ wwwnc.cdc.gov/eid/article/24/8/17-1171_article

⁴ www.bcmj.org/journal, May 2019 issue

easier to detect than chronic infections, when dogs may have intermittent bacteremias. There are a number of approaches for B. canis diagnosis; one commonly used method includes using the rapid slide agglutination test (RSAT) for screening (this test has high sensitivity) and then confirming positive results with agar gel immunodiffusion (AGID) (a test with high specificity).

Contact with breeding animals is the primary risk factor for transmission, as the greatest shedding of the bacteria is in vaginal discharges, semen, birthing fluids and tissues, and aborted fetuses. Lower levels of shedding are possible in urine, feces, and saliva. Brucella spp. are readily killed by most commonly available disinfectants including hypochlorite solutions.

Treatment of dogs infected with B. canis may not always be successful; the bacteria may persist in the tissues of infected dogs following treatment. In a kennel or breeding situation, a screening program and euthanasia of animals that test positive is recommended. Control measures for household pets are not as well established, and consideration should be given to the human-animal bond and the risk to humans and other dogs. The primary risk is to household members, including humans and other dogs. All household dogs in homes with imported dogs should be tested. For dogs that test positive, one option is sterilization, antimicrobial therapy, and repeat testing to ensure elimination of the bacteria. In male dogs, castration may not prevent dissemination of the bacteria because B. canis can persist in the prostate and lymphoid tissues. Euthanasia of dogs with canine brucellosis is an option to consider in refractory cases or in situations where human exposure carries higher risk.

WHAT CAN YOU DO?

- Help your clients understand the risks to both animal and human health from imported dogs.
- Recommend screening of imported dogs for Brucella canis.
- gov.bc.ca or 604.556.3066).

ONLINE RESOURCES

- www.nasphv.org/Documents/BrucellaCanisInHumans.pdf
- www.cfsph.iastate.edu/Factsheets/pdfs/brucellosis_canis.pdf
- www.wormsandgermsblog.com/2019/03/articles/animals/dogs/brucella-canis-ontario

Erin Fraser, BSc, MSc, DVM, is the BC Centre for Disease Control's public health veterinarian. She received her BSc in 1993, DVM in 1998, and MSc in 1999, all from the University of Guelph. She has over 20 years of experience as an epidemiologist, public health veterinarian, researcher, and executive director. Dr. Fraser's professional interests include animal health, public health,

zoonotic diseases, antimicrobial use and resistance surveillance, and food security. She co-founded Veterinarians without Borders-Canada, and has worked with interdisciplinary and multicultural teams to develop programs and projects that address public and animal health issues.

"CONTROL MEASURES FOR HOUSEHOLD PETS ARE NOT AS WELL ESTABLISHED, AND CONSIDERATION SHOULD BE GIVEN TO THE HUMAN-ANIMAL BOND AND THE RISK TO HUMANS AND **OTHER DOGS.**"

• Communicate positive results to a public health veterinarian. Brucella canis is not currently reportable in BC, but information about the occurrence of the pathogen in the province will inform communications and policy discussions. To report results, please contact public health veterinarians Erin Fraser (Erin.Fraser@bccdc.ca or 778.677.7790) or Brian Radke (Brian.Radke@



Brian Radke, PhD, DVM, is a public health veterinarian at the BC Ministry of Agriculture's Animal Health Centre in Abbotsford. Following graduation from the WCVM in 1989, Brian spent five years in private veterinary practice in Ontario and the Fraser Valley with a focus on dairy herd health. Following a PhD in agricultural economics from

Michigan State University, he was employed by Alberta Agriculture as a dairy cattle research veterinarian and a research economist. Dr. Radke was a public health veterinarian at the BC Centre for Disease Control for five years before joining the Ministry of Agriculture in 2011.

BC WILDLIFE AND 4 33(4) N 🔰

BY HELEN SCHWANTJE, DVM, MSc, AND SERGEANT STUART BATES

BACKGROUND

Day-to-day veterinary practice in BC often involves examining or treating injured or abandoned non-domestic animals or advising on their care. Some veterinarians in BC work regularly with either native or non-native species. These animals may be from wild sources (free-ranging) or captive bred. They may be presented to clinics by government staff, wildlife rehabilitation centres, zoos, conservation breeding facilities, professional animal handlers, or private citizens who either hold such species as "pets" or are well-meaning caregivers of found animals.

Most CVBC registrants who include non-domestic species in their practices are well versed in their medicine and surgery, but, if not, should have no difficulty in developing the appropriate knowledge base via their information networks. However, there are legal requirements that may not be so well known or understood for the possession and care of non-domestic species by the public and veterinary professionals.

In addition, in 2009, the BC Wildlife Act and its regulations were changed to now control the possession of specific species. While providing legal information may not be a common part of veterinary practice, CVBC registrants who treat or hold wild species temporarily or for a longer term need to be aware of the rules their practices should follow, and to be able to advise their clients.

Finally, the profession is obligated to give advice on the appropriateness of holding such animals as pets and the potential for human and ecosystem health and safety issues as well as animal welfare issues. The regulations are meant to protect the animals from disease and improper treatment, even from well-meaning individuals who may not have the knowledge or facilities to properly care for them.

THE OLD AND NEW WILDLIFE ACT REGULATIONS

Under the BC Wildlife Act, wild animals are classified into two general categories: those that are native to BC and those that are not-that is, alien or exotic species. Species native to BC are defined as wildlife, and their possession is allowed under permit. In order to possess live or dead wildlife, or wildlife parts, a permit is required. You can apply online through Front Counter BC at www.frontcounterbc.gov.bc.ca.

Since the spring of 2009, the BC Wildlife Act also lists species considered "controlled alien species" (CAS). Animals listed as CAS are not wildlife. The act defines CAS as species that are not native to BC and are considered either a public safety or health threat or a threat to the environment. Large constrictor snakes, large lizards such as Komodo dragons, primates, crocodilians, and large felines are in this category. At this time, species that pose a serious or lethal threat to humans are of the highest concern. Regulations to control such species were created with a list of CAS that individuals are prohibited from possessing unless the animal was in BC before March 2009. Members of the public in possession of a CAS-listed animal in BC before 2009 may be able to keep the animal until its death if they comply with a number of requirements and restrictions. Some of these include:

- Owners must have applied for, and been granted, a permit from the Ministry of Environment before March 31, 2010.
- Only an accredited zoo (accredited by Canada's Accredited Zoos and Aquariums), research institution, or educational institution may breed a listed animal. Accredited zoos, research institutions, and educational institutions can continue to acquire, breed, and possess the listed species.
- The film industry is required to apply for permits to temporarily bring any listed animals into BC and must remove those same animals from BC when their film shoot is completed. Penalties for violating the regulation may include one or more

of the following: a maximum fine of \$250,000 and/or up to two Society for the Prevention of Cruelty to Animals (BCSPCA). The years of imprisonment, seizure of the animal and removal from Canadian Criminal Code covers criminal offenses respecting inthe province at the owner's expense, or seizure of the animal humane treatment of all animals. and transport to an accredited zoo at the owner's expense. If Wild animals do not make good pets, and it is the position of removal is not possible, the animal may be euthanized. The full many professional organizations that the public should be dislist of controlled alien species and the requirements and restriccouraged from attempting to keep wild animals as pets. Here are tions under the new regulation contained in the Wildlife Act some position statements on wild animals as pets: are posted on the CAS website at: www2.gov.bc.ca/gov/content/ environment/plants-animals-ecosystems/cas.

WILDLIFE REHABILITATION

Some BC veterinarians help wildlife rehabilitation facilities with the care and treatment of injured or orphaned wildlife either at the rehabilitation facility or for a short term at a veterinary clinic. Holding wildlife for the purpose of rehabilitation or rearing orphaned wildlife requires a specific permit "to possess, treat, release, and euthanize, if necessary" wildlife. This permit may cover all or specific groups of wildlife species. Generally speaking, to receive a permit, an applicant needs to show that there is a need in the community for such services, and that the applicant:

- has approved facilities for the species to be admitted;
- can demonstrate training or experience in this field;
- has an established relationship with a veterinarian licenced in be obtained from Gloria White, Canadian Wildlife Service, 5421 BC: Robertson Road, Delta, BC. She can be reached at 604.940.4650 • has the appropriate liability insurance; and (fax 604.940.7022). Guidelines on the care and use of wildlife for • submits annual records of all wildlife treated. research purposes are available through the Canadian Council Full details on how to obtain a permit for a designated rehabilitaon Animal Care. Humane euthanasia standards for wildlife are tion facility are available on the Front Counter BC website. available through the CCAC, the American Veterinary Medical Association (www.avma.org/KB/Policies/Documents/ euthanasia.pdf), and from many wildlife agencies and professional organizations for specific species.

WHERE TO FIND OUT MORE

If you have questions or concerns about any specific situation, please call the Report All Poachers and Polluters line at



Helen Schwantje, DVM, MSc, is BC's wildlife veterinarian, working at the Wildlife and Habitat Branch of the BC government since 1992. She graduated from the WCVM in 1981 and practised in BC in mixed animal and zoo animal practice. In 1987, she completed an MSc in Veterinary Pathology (specialty in wildlife diseases), studying the evaluation of health status of bighorn sheep herds in the East Kootenay region. Her work with wild sheep

continues, along with many other competing priorities. In her other life, she bought a farm in 1986 that is now more than 100 years old where she has a live-off-the-land hobby, raising domestic sheep and other edibles. Fortunately, her husband is a great cook.

1.877.952.7277 as a non-emergency and leave a voice message for the local conservation officers. For more information on controlled alien species and the process that is underway, see the CAS website at www2.gov.bc.ca/gov/content/environment/ plants-animals-ecosystems/cas. All provincial permits for the possession of wildlife (excluding migratory birds) and for wildlife rehabilitators are administered by Front Counter BC at www.frontcounterbc.gov.bc.ca.

In addition to the authority of the BC Wildlife Act, the care and humane treatment of wildlife in captivity is governed by the BC Prevention of Cruelty to Animals Act and enforced by the BC

- Canadian Veterinary Medical Association—Keeping of Exotic or Native Wild Animals as Pets: www.canadianveterinarians.net/ documents/keeping-native-or-exotic-wild-animals-as-pets
- Canadian Veterinary Medical Association—Capture of Wild Animals for the Pet Trade: www.canadianveterinarians.net/ documents/capture-of-wild-animals-for-the-pet-tradeposition-statement
- Canadian Federation of Humane Societies—Wild or Exotic Animals as Pets: www.humanecanada.ca/companion_ animals_position
- Association of Exotic Mammal Veterinarians and American Veterinary Medical Association: www.avma.org/KB/Policies/ Pages/Ownership-and-or-Possession-and-Appropriate-Disposit ion-of-Wild-and-Exotic-Pet-Species-or-Their-Hybrids.aspx Information regarding permits for migratory bird species can



Stuart Bates, a sergeant in the Conservation Officer Service, graduated from Malaspina University-College (now Vancouver Island University) in 2004 with a diploma from the Resource Management Officer Technology Program. After being stationed in Dease Lake, Victoria, and Duncan, he currently works in Nanaimo in the Central Island Zone, which covers Chemainus to Deep Bay and Bamfield to Ahousaht. He has owned dogs his whole life, and although he usually prefers the bigger breeds, he currently has a Papillon.

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1.800.663.1144 1.888.384.1152 (TTY)

www.homewoodhealth.com

Additional mental health and wellness resources are listed at: www.canadianveterinarians.net/documents/mental-health-support-resources

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AS REPORTED IN THE MEDIA

- REPORT DEAD RABBITS IN WAKE OF VIRAL OUTBREAK: BC'S CHIEF VETERINARY OFFICER vancouverisland.ctvnews.ca/report-dead-rabbits-in-wake-of-viral-outbreak-b-c-s-chief-veterinary-officer-1.4376085
- DON'T FORGET FIDO: BCSPCA HOPEFUL BC FERRIES CONSULTATION INCLUDES PET TRAVEL www.citynews1130.com/2019/04/08/bc-ferries-dogs
- → CFIA AND CVMA RAISING AWARENESS OF AFRICAN SWINE FEVER THREAT www.veterinarypracticenews.ca/cfia-and-cvma-raising-awareness-of-african-swine-fever-threat/?ads=disable
- CVMA DEVELOPS NEW ONLINE ANTIMICROBIAL RESOURCE www.veterinarypracticenews.ca/cvma-develops-new-online-antimicrobial-resource/?ads=disable
- ADVOCATES CALL ON CFIA TO GET MOVING ON ANIMAL TRANSPORT REGULATIONS ipolitics.ca/2019/02/06/advocates-call-on-cfia-to-get-moving-on-animal-transport-regulations/?fbclid=IwAR19M5 dM6jKrglSiJl4-RYYGdhTfNhuLf9_LgR86dqKB3BlU1KPP6yx7CU8
- ANTIBIOTIC RESISTANCES SPREAD FASTER THAN PREVIOUSLY THOUGHT, AQUACULTURE STUDY REVEALS www.sciencedaily.com/releases/2019/02/190219170108.htm
- → WHY CALVING SEASON IS DIFFERENT THIS YEAR www.canadiancattlemen.ca/2019/02/28/why-calving-season-is-different-this-year
- ALBERTA VETERINARIANS VOTE TO BAN DECLAWING, EAR CROPPING, TAIL DOCKING SURGERIES: "IT'S INHUMANE" globalnews.ca/news/4995963/alberta-veterinarians-unnecessary-surgery-ban-animal-abuse

NATIONAL MESSAGES

- → 2019 WSAVA/CVMA JOINT CONGRESS July 16–19, 2019; Toronto; 10 CE tracks per day (wsava2019.com/scientific-program). Signature events: Global Summit, Global Forum, Emerging Leaders Program, AGM and Awards Ceremony.
- AGRICULTURE PRESENTATION: PUBLIC PERCEPTION OF CANADIAN AGRICULTURAL SECTOR The veterinary profession has a responsibility to help ensure public perception of the agri-food system remains positive. More: canadianveterinarians.net. (www.canadianveterinarians.net/news-events/news/ cvma-presents-commons-agri-committee)
- HEALTH CANADA LETTER: CONSULTATION ON CANNABIS EDIBLES/EXTRACTS/TOPICALS CVMA strongly urges that veterinarians be allowed to provide necessary medication to their patients and requests a warning statement on THC-containing products. More: Policy & Advocacy. (www.canadianveterinarians.net/ documents/cvma-letter-to-health-canada-open-consultation-on-cannabis-edibles-extracts-topicals)
- CVMA WELCOMES HUMANE TRANSPORTATION AMENDMENTS WITH SOME RESERVATIONS The regulations on compromised animals will place some animals at risk of suffering. More: News & Events. (www.canadianveterinarians.net/news-events/news/cvma-welcomes-humane-transportation-amendments -with-some-reservations)
- WEBINAR ON BRINGING BACK INACTIVE CLIENTS The Inactive Client Reminder Program can benefit your practice! Find the webinar under News & Events. (www.canadianveterinarians.net/news-events/news/webinar-to-help-bring-back-your-practice-inactive-clients)
- BEST PRACTICES FOR SUBMITTING DRUG ESTABLISHMENT LICENCE (DEL) APPLICATIONS Visit the News & Events section of canadianveterinarians.net for guidance from Health Canada.

SURVEYS & REPORTS

- 2018 CVMA PRACTICE OWNERS ECONOMIC SURVEY RESULTS (PRACTICE MANAGEMENT RESOURCES) www.canadianveterinarians.net/practice-economics/practice-management-resources
- > 2018 NON-DVM WAGE REPORTS (BUSINESS MANAGEMENT) www.canadianveterinarians.net/practice-economics/business-management
- SCVMA NEW GRADUATE SURVEY REPORT: CLASS OF 2018 (STUDENTS OF THE CVMA WEB SECTION) www.canadianveterinarians.net/practice-economics/business-management



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Reference: 1. Summerfield NJ, Boswood A, O'Grady MR, et al. Efficacy of pimobendan in the prevention of congestive heart failure or sudden death in Doberman Pinschers with preclinical dilated cardiomyopathy (the PROTECT study). J Vet Intern Med. 2012;26(1):1337-1349.





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After graduating from the Western College of Veterinary Medicine in 2012, Dr. Zwueste completed her residency in neurology and neurosurgery at the University of California, Davis. She became a Diplomate of the American College of Veterinary Internal Medicine (Neurology) in 2016 at which time she returned to the WCVM in 2016 as an assistant professor in the college's Department of Small Animal Clinical Sciences. Her interests include advanced imaging, intracranial disease and feline neurology.

Dr. Zwueste is looking forward to helping support your patients and clients across the lower mainland. To learn more about Dr. Zwueste and the rest of our specialty team, please visit our website or call the hospital.

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Dr. Danielle Zwueste DVM, DACVIM (Neurology)