



## A Letter From The President

November/December 2015

Happy Holidays!! Most of us have a busy few months ahead trying to get ready for the holidays as well as work and spend time with family and friends. This also means that the New Year is right around the corner. It will be time to make new resolutions and think back on old ones. I wonder how many followed my suggestion regarding work/life balance and spending more time outside of the office.

Speaking of time, have you taken our newsletter survey? If not, please visit [www.kcvma.com](http://www.kcvma.com) and click on the link at the top right. Based on what our final survey responses are, there could be drastic changes to the newsletter moving forward. This is in an effort to be mindful of how your dues are spent; production of the newsletter requires a healthy portion of our budget.

Due to scheduling conflicts, we were very sorry to announce that Bayer was unable to host our day-long Sunday CE this year. It should be back in normal rotation for 2016. We will instead have a two hour CE this month, on Thursday November 19th at the Hereford House in Leawood, KS. If you haven't registered yet, please visit [www.kcvma.com](http://www.kcvma.com) and click the icon in the upper right of the page. Please remember we are always looking for new ideas (we have discussed different topics like Exotics, Practice Management, etc.), so feel free to give us feedback!

As I sat to write this, my final President's letter, it triggered a review of the major events of the year, both personal and

professional. It has been a crazy roller coaster, full of major highs and very sad, deep lows. This has resulted in forced, but necessary, contemplation of what is really important and for me to stop being so hard on myself when the house isn't spotless or I haven't finished everything on my to-do list. These are things that can wait. I am grateful that instead, I took time off work to be with my father before he passed and took time to heal after we lost him. I have to then remind myself that while it is very easy to jump back headfirst and get completely re-absorbed in my clinic, that I cannot. I can no longer look at the clock and realize it is 8 pm and I'm still at my desk. I know this is a real struggle for a lot of us, with society telling us to do more, to strive for perfection. I have come to realize that I am okay with not being perfect. At the end of the day I just want to go home, snuggle my spouse and animals and enjoy the wonderful people around me.

It has truly been a pleasure serving on the KCVMA board and I will miss it! I wish all of you the best of luck in any endeavor you choose.

Christi Belew

President - [cbelew@kcvma.com](mailto:cbelew@kcvma.com)

### KCVMA 2016 Membership Renewal Reminder

As 2015 draws to a close and we prepare to celebrate a new year, the KCVMA would like to express our appreciation for each of our members. Our goals as an organization are simple - to support and celebrate Kansas City-area veterinarians through continuing education and networking opportunities, and by advocating on behalf of our members and our profession. Your membership in the KCVMA allows us to strive for the best quality speakers, venues and resources possible. Without you, the KCVMA wouldn't be what it is today.

Membership payments are due at the beginning of each calendar year. Please visit <http://members.kcvma.com> and follow the instructions provided to renew your membership for 2016 by January 1st. Remember - only dues-paid members may attend continuing education opportunities and social events. If you have questions about the renewal process please contact our website administrator (Darin Nadler, [dnadler@kcvma.com](mailto:dnadler@kcvma.com)).

**Note to Life Members:** Even though your membership is complimentary, we ask that you complete the renewal process. This critical step keeps you in our system as an active member. If you choose not to renew, we'll assume you no longer wish to be an active member and we'll remove you from our contact lists. If you would prefer to renew via email please feel free to contact Darin Nadler ([dnadler@kcvma.com](mailto:dnadler@kcvma.com)) or Wanda Geis ([wgeis@kcvma.com](mailto:wgeis@kcvma.com)).

# Chronic Pain

BY: MATT PEUSER, DVM, CVPP, CVA

Chronic pain is not just acute pain that has gone on too long; it is a complex situation involving changes that occur within the nervous system. Causes of chronic pain can include chronic stomatitis in cats, chronic otitis, cancer and cystitis. However, the most common cause of chronic pain in dogs (and likely cats) is degenerative joint disease. Not only are there inflammatory and degenerative changes in the joints, the misuse and compensation that occur when animals shift their weight causes myofascial trigger points. Myofascial trigger points are areas of contracture within the muscle that occur when a muscle is overused or misused, but can also occur with disuse. An example of this is the dog with hindlimb lameness that shifts its weight to its forelimbs. This results in overuse of its triceps, infraspinatus and supraspinatus muscles (among others) on the forelimbs, as well as disuse of the hip flexors and lumbar epaxial muscles. These muscles can all develop trigger points that cause pain, decreased range of motion and decreased mobility and flexibility.

Any of these pain processes that last for an extended period of time beyond the normal healing process can cause changes that occur within both the peripheral and central nervous systems, resulting in chronic pain. Peripheral sensitization is caused by an increase in inflammatory mediators. Central sensitization, which is manifested as wind-up pain, hyperalgesia (increased sensitivity to painful stimuli), or allodynia (pain associated with non-painful stimuli), is caused by specific changes in the nervous system. These changes involve substances and receptors such as N-methyl-D-aspartate (NMDA) receptors, serotonin, norepinephrine, cyclooxygenase (COX) enzymes and glial cells. Chronic pain is a disease in its own right. Each individual patient will respond differently to the pain itself but will also respond differently to treatment, making chronic pain management challenging.

Treating chronic pain depends on making accurate and thorough assessments of each individual's causes of pain. It's not enough to treat the dog with chronic stifle arthritis secondary to cranial cruciate disease for inflammation with a non-steroidal anti-inflammatory drug (NSAID). The changes that have occurred within both the supporting musculature and the peripheral and central nervous system need to also be addressed. Treatment of chronic pain should be multimodal. Multimodal treatment not only allows for more effective therapy, but also allows for reducing the risks of any one drug. Treatment options include the following: multimodal pain medications

(generally at least three), physical rehabilitation, acupuncture and myofascial trigger point therapy, joint support and natural supplements.

Bone cancer is another common cause of chronic pain. Treatment includes all of the above as well as pamidronate and additional patient supportive therapy (melatonin to help the patient sleep and low carb diets, for example). Aggressive analgesia using constant rate infusions and epidural injections are also options for bone cancer-related pain.

Multimodal pain medications for chronic pain include the use of NSAIDs to help alleviate inflammation both peripherally and centrally. Acetaminophen is classified as a COX-3 inhibitor and can be used along with traditional NSAIDs. Never use acetaminophen in cats. Gabapentin is used commonly for wind-up pain which occurs in the dorsal horn of the spinal cord. Starting doses are in the 5 to 10 mg/kg BID to TID range. I then increase the dose every week or two until the patient is more comfortable. I have personally use doses as high as 45 mg/kg but there are doses in the literature as high as 200mg/kg. Sedation is the main adverse effect and can be mitigated by slowly increasing the dose.

SSRIs are an important tool in the chronic pain toolbox. Serotonin and norepinephrine are involved in the descending inhibition of pain that occurs within the spinal cord. Tramadol is an important medication that suppresses the reuptake of both serotonin and norepinephrine. In dogs it is a weak opioid as well, but in cats it is a strong opioid. Amitriptyline is another SSRI that works well in many cases.

Due to the role of the NMDA receptors in central sensitization, antagonism of these receptors is important in treating chronic pain. Ketamine can be used in a CRI for 24 to 48 hours for the extremely painful patient and is often combined with an opioid and lidocaine. Amantadine, an anti-viral drug, is an oral NMDA antagonist. The starting dose of amantadine is 3-5mg/kg SID for three weeks. Some patients respond well enough that amantadine is used indefinitely. Amantadine may also be used BID in severely painful patients. Adverse effects are related to the gastrointestinal system (vomiting, diarrhea).

Minocycline has a role in glial cell suppression. Glial cells within the spinal cord can contribute to upregulation of the pain response resulting in hyperalgesia or allodynia. Chronic opioid usage also causes upregulation of glial cells. Minocycline inhibits the activation of glial cells and exerts an antihyperalgesic effect.

Physical rehabilitation, acupuncture and myofascial trigger point therapies all fall into the category of physical modalities. All three can help reduce pain and improve range of motion, flexibility and help improve function and mobility. These all contribute to decreased pain and improved quality of life for the patient.

Supportive therapy for the joints includes the FDA-approved osteoarthritis disease modifying agent Adequan Canine®. After the initial series, Adequan can be used extralabel on an ongoing basis. Many owners can be shown how to give Adequan at home as well. Studies have demonstrated that it is effective when given subcutaneously. Supplements that can support the health of the joints as well as reduce pain and inflammation include microlactin, elk velvet antler, glucosamine, chondroitin, hyaluronic acid, bosweilia, turmeric, avocado soy unsaponifiables and omega-3 fatty acids.

Resources:

- VIN Rounds: "Understanding and managing chronic pain" by Bob Stein
- Proceedings: "Management of Chronic Pain", British Small Animal Veterinary Congress 2013, Sheila A. Robertson
- Pain Management for the Small Animal Practitioner; Second Edition William J. Tranquilli, DVM, MS, DACVA
- Proceedings: "Chronic Pain Control in the Dog: When NSAIDs Don't Work" International Veterinary Emergency and Critical Care Symposium 2010, Patrice M. Mich, DVM, MS, DACVA, DABVP (Canine & Feline Practice)
- Veterinary Clinics of North America: Small Animal Practice, "Update on Pain Management" November 2008, Volume 38

## RECORD OF KCVMA CONTINUING EDUCATION SEMINARS FOR 2015

DATE	SPEAKER/TOPIC	C.E. CREDIT
January 15	<b>Lisa A. Miller, DVM, CCRT, CVA (pending), LiteCure, LLC / Companion Therapy Laser</b> An Introduction to Laser Therapy & How to Integrate the Technology	2 Hours
March 1	<b>Various Speakers</b> 9th Annual Frostbite Continuing Education Symposium	6 Hours
March 19	<b>Dr. Daniel Joffe, National Medical Director, Associate Veterinary, Clinics Calgary, Alberta, Canada</b> When Less is Best: Lowest Effective Dose-Optimizing NSAID Protocols and Client Compliance	2 Hours
April 16	<b>Dr. Joel Sailor, Owner, Town &amp; Country Veterinary Clinic, Starke, Florida</b> Ringmaster: Using Science and Management Principles to Tame the Flea Circus	2 Hours
April 17	<b>Jim Kallman, DVM</b> Current Therapies for Common Endocrine Diseases, Diabetes Mellitus, Canine Hypothyroidism, and Canine Spayed Female Urinary Incontinence	2 Hours
May 21	<b>Joe Holzhauser, DVM, MBA, MPM, Managing Area Veterinarian, Zoetis</b> Another Itchy Dog	1 Hours
June 18	<b>Dr. Brian Patrick</b> Increasing the value of the physical exam, building trust with clients and making a solid recommendation	2 Hours
July 16	<b>Catherine Lenox, DVM, CVA, Diplomate ACVN, Scientific Affairs Manager, Royal Canin</b> Nutritional Approach to Managing Lower Urinary Tract Disease in Cats & Dogs	1.5 Hours
September 17	<b>Nora Grant, DVM, Veterinary Services Manager, Ceva Animal Health</b> Skin is on the Outside	1 Hours
November 19	<b>S. Dru Forrester, DVM, MS, DACVIM, Director, Global Scientific Affairs, Hills Pet Nutrition</b> Transforming Lives With Therapeutic Nutrition	1.5 Hours

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for its members and guests.

All suggestions and comments are welcomed.  
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## Built on the Shoulders of Veterinary Giants: The Dog Who Went to War

BY: DR. STEVE JOSEPH, KCVMA HISTORIAN

In honor of Veterans Day here is a story about a WWI hero dog. Rags was a mixed breed terrier who became an Army mascot. He was so named because he was found abandoned on a Paris street by Private James Donovan, who thought the dog was a pile of discarded clothing.

Donovan feared he was late reporting to his unit and developed a story to avoid punishment. He told military police that Rags was the missing mascot of his infantry division, and Donovan was part of a search party who found him. Rags played that role for many years and became a hero and military celebrity, receiving many medals and awards.

Rags remained with Donovan when the private was ordered to the front lines. The soldier had many duties, including repair of communication wiring damaged by shellfire. Maintenance was slow and time consuming. Runners were frequently called on to carry the word, but they were often wounded or killed. To help the runners, Rags was trained by Donovan to carry messages attached to his collar.

During a battle in the summer of 1918 Donovan and his infantry unit were surrounded by the enemy. Rags carried a message that resulted in an Allied artillery barrage and reinforcements that rescued the soldiers. News of Rags's heroism quickly spread throughout the division.

In the fall of the same year Donovan and Rags were called on to carry more messages to secure a major objective. This action saved countless lives.

Later, Donovan and Rags were victims of shellfire and gas attacks. Both were taken to several hospitals with "priority orders" from headquarters. Donovan died in a US hospital in



early 1919. Rags experienced a severe wound to his paw along with facial and eye injuries. Major Raymond Hardenbergh and his family took over Rags's guardianship.

It was said of Rags that during the war he would lie flat on the ground with paws extended when his superior canine hearing detected incoming artillery fire. Soldiers followed his lead. He also learned to salute by extending his paw above his right eye.

After the war Rags became a well – known celebrity. The *New York Times* carried articles about him and a book was written about the hero dog. In 1928 he marched down Broadway with troops as part of a 10th anniversary WWI reunion.

Rags died in 1934 at age 20. He was buried with honors at Aspen Hills Memorial Park and Animal Sanctuary in Maryland where an impressive monument was erected to honor the hero.

*Notes and picture provided by the U.S. Army at Fort Riley and the Cantigny Library in Wheaton, IL.*



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## CONTINUING EDUCATION EVENTS

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### November CE

Speaker: S. Dru Forrester, DVM, MS, DACVIM  
Director, Global Scientific Affairs  
Hills Pet Nutrition

Topic: Transforming Lives with Therapeutic Nutrition

Date: Thursday, November 19, 2015

Time: 6:30pm – Check in, 7pm - Dinner and Presentation

CE: 1.5 hours

Location: Hereford House - Leawood  
5001 Town Center Drive  
Leawood, KS 66211  
(Maximum Capacity is 60, so don't wait to register!)

Fee: No fee to attend this event, but RSVP is required by Monday, November 17th. Current membership dues cover all CE.

Sponsor: Hills Pet Nutrition

**Please register by Monday, November 17th at [KCVMA.com](http://KCVMA.com)**



A behind-the-scenes look at how we design and create therapeutic foods to meet the needs of your patients. We'll discuss practical tips you can implement right away and address the use of therapeutic nutrition for managing common conditions in dogs and cats including obesity, arthritis, kidney disease, cognitive dysfunction and feline lower urinary tract signs.

Dr. Forrester received her DVM from Auburn University in 1985. She completed an internship and residency in internal medicine, and received a Master of Science degree at Texas A&M University.

Dr. Forrester was a faculty member in the Department of Small Animal Clinical Sciences at the Virginia-Maryland Regional College of Veterinary Medicine for 13 years and a professor at the Western University College of Veterinary Medicine in southern California for two years. She has received many awards in recognition of teaching excellence, including the national Carl Norden/Pfizer Distinguished Teacher Award in 2004.

Dr. Forrester's professional interests include urology and nephrology. She joined Hill's Pet Nutrition in 2005 in the Department of Scientific Affairs and is a Mark Morris Institute Fellow.

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## KCVMA SOCIAL EVENTS

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### KCVMA Day at the Zoo

Kayla was our very informative behind-the-scenes tour guide of the newly built Helzberg Penguin Plaza. She showed us the penguin and polar bear prep kitchen (fish included), the life support systems (aka water filtration/ recycling equipment) and let us go out on the ramp in the penguin exhibit for a closer look! Super cool, but BRRRRR! We then enjoyed a great BBQ lunch after walking all over the zoo! Thanks for letting some of us get a final peek at Nikita before he leaves KC! – Dr. Kathleen Claussen



*Photos courtesy of Dr. Kathleen Claussen*

### October CE at TopGolf



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## CLASSIFIED ADS

Send your classified ads to: Wanda Geis, PO Box 12468, Shawnee Mission, KS 66282-2468, or email them to [classifieds@kcvma.com](mailto:classifieds@kcvma.com). Ads must not be over 100 words in length. Classified ads will be run at the sole discretion of the editor and may be edited for content. Deadline for the next newsletter is 12/13/15.

Associate mixed animal veterinarian wanted for Drexel Veterinary Clinic in Drexel, MO, and Wildcat Veterinary Clinic in Louisburg, KS. Both clinics are fully equipped with digital radiography, in-house blood machines, ultrasound, isoflurane anesthesia and an in house coggins lab. We are a quickly growing practice with wonderful staff and clients. Please contact Dr. Aaron Stohs at 913-660-4040 or [stohsdvm@yahoo.com](mailto:stohsdvm@yahoo.com).

Veterinary Technician Needed. Full or part-time considered. Experience preferred. Please send resume' to [lloracook@yahoo.com](mailto:lloracook@yahoo.com) or drop off at Lionsgate Pet Hospital, 14327 Metcalf Ave. Overland Park, KS 66223. Any questions regarding this add, please contact Lloracook at 913-402-8300 or by the email listed above.

Platte Woods Animal Hospital is a small animal practice that is currently seeking a registered veterinary technician and veterinary assistant. We would prefer someone who is full-time but would be willing to consider part-time applicants. We are a very team-oriented practice that takes great pride in our medical care so please apply if you are a team player, professional, and are determined to give the best care to your patients. You can apply in person at 5901 NW 72nd St. Kansas City, MO, 64151, by emailing [plattewoodsanimalhospital@gmail.com](mailto:plattewoodsanimalhospital@gmail.com), faxing your resume to 816-741-7322 or calling 816-741-8607 and asking for KateLynn.

Spay & Neuter Kansas City is seeking a full-time veterinarian to join our team as well as other supporting staff positions for our second location opening soon. SNKC is a nonprofit, continually growing organization that is making a difference in the Kansas City area with our innovative programs. We offer a rewarding work environment with an incredible support team. For more information about Spay & Neuter Kansas City or this position visit [www.snkc.net](http://www.snkc.net) under the Customer Service tab!

Our busy two-doctor small animal practice located in western Shawnee is in need of a full-time registered veterinary technician.. One year experience is preferred. Must be available to work on Saturdays. Please send resume to [accoakvalley@att.net](mailto:accoakvalley@att.net) or bring it in person to: Animal Care Clinic, 5576 Hedge Lane Terrace, Shawnee, Ks 66226.

Grain Valley Animal Hospital is currently hiring for an associate full or part-time veterinarian. Our office is located just 20 miles east of Kansas City. We have flexible work days/hours, offer PTO and holiday pay, continuing education and other competitive benefits. Email resume to [grainvalleyah@gmail.com](mailto:grainvalleyah@gmail.com) or call Dr. O'Brien 660-441-0413.

Turner Animal Hospital is a two-doctor small animal practice in Kansas City, KS. We are looking for an associate veterinarian. We have state of the art equipment such as Digital X-ray, Idexx In-house lab and Cornerstone Practice Management Software. We currently only see canine and feline patients. If you have a strong interest in exotics we would be open to treating exotics. Pay depends upon experience. There is a generous benefits package work up to \$9,000 a year. Please send your resume and salary requirements to [turneranimalhospital@gmail.com](mailto:turneranimalhospital@gmail.com).

Great Plains SPCA is seeking an energetic, compassionate and innovative lead shelter veterinarian to join the team at our Independence, MO, campus where we serve over 5,000 pets a year. As lead shelter veterinarian, responsibilities include: providing high-quality diagnostics and treatment to shelter pets; spay/neuter and other surgeries such as cystotomy, enucleation, amputation, mass removal, entropion, etc. along with dentistry and post-adoption follow-up appointments. Candidates must be licensed to practice veterinary medicine in the state of Missouri and obtain a BNDD license and DEA license. Interested candidates can send their resume to [cthomas@greatplainspcpa.org](mailto:cthomas@greatplainspcpa.org).

Associate mixed animal position immediately available in a three-doctor busy mixed practice 30 mi. north of Kansas City in Plattsburg, MO. The practice is 75% companion animal, 20 % bovine and 5% equine. Substantial signing/retention/relocation bonus available to the right individual. Contact Dr. Paul B. Terry, Plattsburg, MO at 816-930-2629 or fax 816-930-2630 or [pterry@animalclinicpc.com](mailto:pterry@animalclinicpc.com).

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## RELIEF VETERINARIANS...

Jerome Berkowitz.....913-515-3917 KS/MO	Shelley Lake.....913-533-9905 KS	Dennis Smith.....913-636-4206 KS
Martin Drey.....785-218-9484 KS	Chris Lewis.....702-767-8012 KS	Paula Vale.....913-484-7012 KS/MO
Beth Foster.....785-447-0806 KS	Tiffany Lewis.....321-332-4949 KS	Kenneth VanSickle.....816-331-7972 KS/MO
Marsha Heeb.....785-331-2167 KS/MO	Tim Lyon.....913-333-7535 KS/MO	Dennis Weaver.....816-210-6769 KS/MO
Carol Hinton.....913-897-2794 KS	Mary S. (Peggy) Roth.....785-748-0055 KS/MO	

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## CERTIFIED SPECIALISTS

<b>Acupuncture:</b> Sally Barchman, DVM, CVA 913-381-3272 Teresa Bradley-Bays, DVM, CVA, DABVP (ECM) 816-331-3120 Sheila Dodson DVM, CVA 913-825-3330	Linda Faris, DVM, CVA 816-746-1333 Leanne Landau Kasitz, DVM, CVA 913-897-5595 Sandi Leonard, DVM, CVA, CVFT, CAC 913-706-0411 Rebecca Lu, DVM CVA 913-825-3330	Matt Peuser, DVM, CVA, CVPP 913-764-1415 Michelle Rhodes, DVM, CVA 816-252-5105 John Rowe, DVM CVA 816-363-4922 Susan Vodraska, DVM, CVA 816-255-8361 Charity Vuagniaux DVM, CVA 816-220-0222
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## VETERINARY DIPLOMATES

<b>Cardiology:</b> Laura Hatton <sup>1</sup> , DVM, ACVIM 913-642-9563	Crystal Hoh <sup>1</sup> , DVM, MS, ACVIM 913-642-9563 Brian Lucas <sup>1</sup> , DVM, Dipl. ACVIM 816-554-4990 Stephanie Pierce <sup>1</sup> , DVM, Dipl. ACVIM 913-642-9563	<b>Surgery:</b> D.A. Allen, DVM, PhD, ACVS 913-722-5566 Kara Forsee <sup>1</sup> , DVM, ACVS 913-642-9563 Karl Frees, DVM, MS, ACVS (Equine) 816-322-7722 Ralph Millard <sup>1</sup> , DVM, ACVS 913-642-9563 Heather Towle-Millard <sup>1</sup> , DVM, ACVS 913-642-9563 Steve Riley <sup>1</sup> , DVM, DVSc, ACVS 913-642-9563
<b>Dentistry:</b> Susan E Crowder, DVM, Dipl. AVDC 913-742-8686 Scott MacGee, DVM, Dipl. AVDC 913-742-8686 Gary L. Modrcin <sup>1</sup> , DVM, Dipl. AVDC 913-642-9563	<b>Neurology:</b> Brian Cellio <sup>1</sup> , DVM, Dipl. ACVIM 913-642-9563	<b>Veterinary Practitioners:</b> John S. Bradley, DVM, ABVP 785-843-9533 Vern Otte, DVM, ABVP 913-381-3272 Eliza Sundahl, DVM, CVA, ABVP 816-361-4888 Steve White, DVM, ABVP 913-432-7611
<b>Dermatology:</b> David Senter, DVM, DACVD 913-381-3937	<b>Oncology:</b> Heather Heeb <sup>1</sup> , DVM, ACVIM 913-642-9563	
<b>Emergency and Critical Care:</b> Mark Brady, DVM, DACVECC 800-548-8387 Ryan Bragg <sup>1</sup> , DVM, DACVECC 913-642-9563 Robin Wall, DVM, ACVECC 913-722-5566	<b>Ophthalmology:</b> Amy Hunkeler, DVM, ACVO 913-381-3937 Heather Kaese, DVM, MS, DACVIM, DACVO 913-381-3937 Susan Keil, DVM, MS, DACVO 913-599-6656 Rustin Sturgeon, DVM, ACVO 913-381-3937	
<b>Exotic Companion Mammals:</b> Teresa Bradley-Bays, DVM, CVA, DABVP (ECM) 816-331-3120	<b>Preventive Medicine:</b> Mark E. Gants, DVM, Dipl. ACVPM 816-228-3205	
<b>Internal Medicine:</b> Jeff Dennis <sup>1</sup> , DVM, ACVIM 913-642-9563	<b>Radiology/Ultrasound:</b> Joanne Burns, DVM, ACVR 785-221-0390	

<sup>1</sup> Practitioner at BluePearl Veterinary Partners