



Llama Could Be Key to COVID-19 Treatments

BY: SAMANTHA BARTLETT, DVM

Scientists in the United States and Belgium are working together to develop antibody therapy against COVID-19 using llama antibodies. A collaboration between University of Texas in Austin, the National Institutes of Health and the University of Ghent in Belgium, the team has been working on developing antibody treatment since 2016 for SARS and MERS with the introduction of the COVID-19 virus, they refocused their efforts on the new virus. The treatment would be similar to a vaccine, but would provide instant immunity that would wear off in 1-2 months. While the antibody treatment will not replace a vaccine when one is developed, the researchers hope to prevent severe illness in people that are already infected and possibly to provide prophylactic protection to at-risk populations such as health care workers.

Llamas are ideal for this research because they have two types of antibodies compared to one type found in the human body. One of the antibodies is normal sized like a human antibody, but the other is smaller by about 25%. It is the smaller antibody, called a nanobody, that seems better able to recognize the COVID-19 virus and to attack the spike proteins the virus uses to attach itself to the host cell. By attacking the spike proteins, the nanobodies should be able to stop infection by the virus. The nanobodies are also easier to manipulate for treatment and easier to mass produce.

The research llama, Winter, has been injected with a protein found on the surface of the COVID-19 virus and has created antibodies to that protein. The researchers isolated the antibodies and have shown effectiveness in neutralizing the COVID-19 virus in vitro. The next step is determining if the antibodies are effective in vivo and then human trials.

Llamas have been used in the past to develop treatments for HIV and influenza. A drug to treat thrombotic thrombocytopenic purpura, called Caplacizumab, is on the market that was developed from llama antibodies.

Homeless Animals See the Bright Side to COVID-19

BY: SAMANTHA BARTLETT, DVM

As the COVID-19 pandemic began, animal shelters across the country braced for the worst. Many shelters suffering funding cuts for staffing and operations and spay/neuter programs foresaw an overwhelming influx of homeless animals.

What happened in the first two months of the pandemic was surprising. Record numbers of people stepped up to foster or adopt animals to the point that many shelters found themselves with only a handful of adoptable animals. People under quarantine found themselves with a lot of time and very little structure. Caring for a pet provides companionship, emotional support and structure to the day.

While shelter workers are both grateful and surprised by the turn of events, they worry about the coming months. As the COVID-19 pandemic has raced through the United States, shelters are seeing an increase in pets coming from homes where their owners have been infected by the virus and been hospitalized or died. The shelters expect this trend to continue but also worry about the possibility of adopted or fostered pets being returned in waves as adopters face more financial constraints or determine a pet is too much responsibility once they return to work. There is also a concern as kitten season is approaching and spay and neuter programs are either disbanded or functioning at reduced capacity due to funding cuts.

Shelters are now focusing on keeping pets in homes by providing pet feeding programs and raising money to help with the financial burden of homing a pet. Shelters are also encouraging people to keep found animals or reach out to their own social networks to find homes for those animals rather than taking them to the shelter. The shelter tries to find family members or friends of owners that have been stricken by COVID-19 to foster or adopt those pets. The ultimate fear is an epidemic of homeless animals that will force shelters to increase euthanasia rates due to lack of space.

Penn's Working Dog Center Trains Dogs to Detect COVID-19

BY: SAMANTHA BARTLETT, DVM

The Penn Vet COVID-19 Research Innovation Fund is backing a pilot program to use scent detection dogs to detect COVID-19 positive people. The University of Pennsylvania School of Veterinary Medicine will train three dogs initially to imprint on COVID-19 positive saliva and urine samples in a lab setting. Once they feel the dogs have learned to specify the odor, the researchers will test if these dogs can detect the scent in infected people. The Penn Vet researchers are working in collaboration the United States Army.

Scent detection dogs have already shown they can detect diseases such as ovarian cancer and other specific cancers as well as specific bacterial infections. If successful, these dogs will provide another tool as officials attempt to implement testing and surveillance to contain the virus that causes COVID-19 particularly for finding asymptomatic carriers.

The researchers are not worried that dogs cannot detect the disease, but are more concerned with confounding factors such as does the coronavirus smell like the influenza virus or other viruses. It will take exposing the dogs to a lot of samples from different people to determine if the virus is unique enough to find with appropriate sensitivity and specificity. Once they determine if dogs can in fact detect coronavirus and do so successfully in a room full of people, they estimate it will take 4-6 months for trainers to bring other dogs up to speed.



Simple Questionnaire Helps Identify Feline Arthritis

BY: SAMANTHA BARTLETT, DVM

Dr. Margaret Gruen and colleagues at the North Carolina State University College of Veterinary Medicine developed a simple question-based checklist to help cat owners determine if their pet may have arthritis so they can better start a conversation with their veterinarian. It estimated that about half of all cats have some level of arthritis and many pet owners aren't aware due to a cat's ability to mask pain. Many times, pet owners think mild behavior changes in their pets are due to aging rather than a disease process such as arthritis.

Dr. Gruen and her colleagues decided to create a simple list of easily answered questions to help guide pet owners into a conversation with their veterinarian if necessary. The team published a paper detailing the design of the checklist in the *Journal of Feline Medicine and Surgery*. The researchers compiled data from several previously conducted studies that used a series of questions as the standardized outcome measure for both undiagnosed cats and cats previously diagnosed with degenerative joint disease. From this data, the researchers were able to develop a series of nine questions that were subsequently whittled down to six. These six questions were selected for the specificity and sensitivity for identifying behavior consistent with DJD in cats.

The six questions are as follows:

1. Does your cat jump up normally?
2. Does your cat jump down normally?
3. Does your cat climb up stairs or steps normally?
4. Does your cat climb down stairs or steps normally?
5. Does your cat run normally?
6. Does your cat chase moving objects (toys, prey, etc.)?

These six yes or no questions can be answered quickly with little difficulty by owners and can give veterinarians important clues to potential diagnostics needed to determine DJD or other disease processes in their patients.

Telemedicine Goes Mainstream in Veterinary Care

BY: SAMANTHA BARTLETT, DVM

The veterinary industry has seen a drastic increase in interest for telemedicine since March. The COVID-19 pandemic has made what was once a novel idea into a mainstream necessity. With many states restricting human interaction, some veterinary hospitals have been scrambling to find a balance between traditional ways of practicing medicine and learning how to conduct telemedicine visits while still providing the best patient care and staying within the limits of the law. In light of this situation, the FDA has loosened its regulations to give veterinarians more freedom to use telehealth. The World Health Organization (WHO) has been encouraging telehealth to monitor patients and decrease hospital visits to majority emergency situations.

Dr. Lori Teller, a clinical professor of Telehealth at Texas A&M College of Veterinary Medicine & Biomedical Sciences, has been conducting webinars and consulting with other academic institutions to help state VMAs and veterinary colleges get up to speed on telemedicine quickly.

By implementing telemedicine, practices can limit contact between hospital staff members and clients and lower chances of spreading the COVID-19 virus. Veterinarians can use this tool to triage patients and determined if the need to be seen at the clinic. Dr. Teller cautions that for telemedicine to be successful, it has to be implemented appropriately into the workflow. Staff members need to be trained to use the correct terms and

verbiage when speaking to clients about telehealth.

Critics of virtual visits cite the inability to perform a full exam and fully care for patients through a distance platform. Understanding that there are certain things that cannot be accomplished through telemedicine does not negate what can be accomplished. You can, however use a virtual visit to educate a client on patient care, triage whether a pet needs to be seen and advise clients on how to care for their pets in certain situations.

Dr. Teller advises starting small with simple dermatology or wound rechecks and management of chronically ill patients such as diabetics. Once you are comfortable with how telemedicine works, you can better decide what can be accomplished via virtual visits and what should be scheduled as an in-clinic visit.

Although the FDA has relaxed their standards on off-label drug usage and veterinary feed directives, other pet medicine is under the jurisdiction of the state veterinary medical associations. Currently, many states have not changed their wording on the ability of veterinarians to establish VCPR through telemedicine; however, if a VCPR is already established, patient care can be provided through telehealth. Just as the COVID-19 pandemic is constantly changing, so is the face of veterinary telemedicine. It is important to keep up-to-date on your state VMA's guidance regarding telehealth and COVID-19 precautions.



A MESSAGE FROM THE PRESIDENT REGARDING COVID-19

In addition to a few announcements, I wanted to remind you that one of the important functions of the KCVMA is to provide support to our local veterinarians. As we enter the uncharted territory of COVID-19, remember that the KCVMA will continue to support our veterinarians and veterinary businesses in any way that we can. Also remember in this time of ever changing news and information, veterinarians are often regarded as a trusted source of information. Therefore, I have included the link to the [AVMA's COVID-19 webpage](#) as an additional resource.

Lets all try our best to be a calming resource to our clients and staff during this time. Every practice will handle things in the matter that is best fit for their practice and that may look different for different practices. If you have any specific questions or concerns, please reach out and we will do our best to facilitate the appropriate next steps.

Respectfully,

Stacey Nickell, DVM

KCVMA President and the KCVMA board of Directors

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<http://www.kcvma.com/online-ce-opportunities>**

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June 17, 2020

Prairie Village Animal Hospital is seeking a full-time, Associate Veterinarian to join our growing and independently owned small animal practice in Corinth Square Shopping Center located in the heart of Prairie Village, Kansas. The selected candidate will join three experienced doctors and an accommodating professional support staff who enjoy working together as a team.

We are looking for a candidate who is well-rounded, motivated, and enjoys medicine and surgery. An engaging personality with strong interpersonal communication skills is a must as our practice has been built upon long-lasting relationships with our clients. This position offers outstanding career advancement opportunity for a candidate with proven character and integrity to go above and beyond for both the practice and our clients. Our hours are Monday – Friday, 9:00 am – 5:30 pm; Saturday 9:00 am – 1:00 pm with one week day off and every third Saturday. Benefits are as follows:

Paid Health Insurance

Paid Time Off

Retirement Plan – Simple IRA

Free pet care

Paid professional liability insurance, association dues, licensing fees and CE allowance

Interested applicants please email resume to mgd2108@gmail.com.

We are offering a starting salary of \$85,000 – \$120,000.

June 16, 2020

We are GROWING and searching for a PT Associate DVM to join our team at Hidden Valley Animal Hospital!

Hidden Valley Animal Hospital is an established, 4-Doctor, AAHA accredited small animal primary care practice located in Independence, MO. We pride ourselves on our culture and passion for our furry friends!

Our spacious facility has been recently renovated and we are fully equipped with Digital radiography, dental digital radiography, and an Ultrasound. You can expect flexibility in your schedule, a healthy work/life balance with PTO and no “on call” or after hours emergency duty. In addition we are offering a competitive salary, paid licensing dues, CE, 401k, and signing bonus or student loan repayment options.

Independence, Mo is an eastern suburb of Kansas City located just north of I-70. The area is growing and has a lot to offer including great shopping and award winning schools. We are minutes away from a variety of sporting events, cultural attractions, and fantastic restaurants. It's a friendly community with so much to offer!

Come join our expanding practice and help us continue to grow!

Please contact Jessica David jessica.david@nva.com for more information or to apply.

June 15, 2020

Small animal Associate needed-Starting @ \$80k-\$100k

If you are looking for a great opportunity as a small animal associate, then look no further-Brisbane Vet Services in Smithville, MO is hiring! We are a mixed animal practice, so if you have an interest in large animals, that is a plus but not required. Experience is a plus but this would be a valuable learning opportunity for a new graduate.

At Brisbane Vet Services, you will be able to practice medicine and surgery to your fullest potential. Our clinic utilizes IDEXX in-house laboratory equipment, a digital x-ray machine, newer high speed dental equipment, a new ultrasound. and many other diagnostic/treatment tools. Our clients are like family and our experienced support staff will help lighten your daily workload.

We are offering a starting salary of \$80k-\$100k and a generous benefits package. Please e-mail your resume to Brisbanevet@gmail.com or call Sonja @ 816-532-8852 for more details.

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June 12, 2020

Our Team is Growing!

Farview Veterinary Hospital is looking for a full time veterinarian for our busy, small animal only practice. Veterinarians are responsible for routine veterinary care including wellness exams, vaccinations, blood work, client education, spays/neuters, mass removal, and dentals.

We utilize new equipment including:

Digital radiographs, Ultrasound, Modern dental machine, Therapy laser, Surgical laser

Farview Veterinary Hospital has been a respected part of the Independence, MO community for over 35 years. At Farview, we focus on treating our clients like family and do our best to provide high quality service. We have registered veterinary technicians for every day and plenty of veterinary assistants to help keep the fast pace going. We utilize our surrounding emergency clinics during the weekends and after hours.

Current licensure in Missouri, BNDD and DEA are required. The schedule needed would be Monday, Tuesday, Thursday, Friday, and rotating Saturdays.

Please contact Dr. Clark at 816-257-5454 or fvhjobs@gmail.com for more information or to apply. Benefits include vacation, health insurance, and paid licensure. Salary will be determined upon experience and interview.

June 10, 2020

We are seeking 2 full or part time veterinary associates for a growing south Kansas City veterinary hospital. We are a full service veterinary hospital that offers advanced surgical and medical options including orthopedic and soft tissue surgery, progressive medical and dental options, some boarding, and full service wellness clinics. Crest is growing rapidly and are looking to expand. Come grow with us. Compensation packages start with a competitive base salary dependent on experience. A \$10,000 signing bonus for a 2 year signed contract, Health and liability insurance, CE compensation including travel to and from site, generous PTO, are all included in the benefit package. Please contact John R Lyle DVM at crest1313@outlook.com

June 10, 2020

Full time VA or RVT – Raymore Veterinary Center is a busy three doctor practice located just south of Kansas City in the growing community of Raymore, MO. We are seeking an energetic & enthusiastic veterinary assistant or RVT to join our team. We are looking for someone who has excellent customer service skills, is very comfortable and confident around dogs and cats of all breeds, sizes and temperaments, who can meet the physical demands of assigned duties, and work Saturday's. We offer competitive salary plus paid vacation and a fantastic work environment.

Job Duties Include (but are not limited to):

Client interaction (telephone, check-in and check-out), assisting veterinary staff, care for hospitalized patients, assisting and preparing for surgery, venipuncture, catheter placement, radiology, and working in the laboratory and pharmacy. Please e-mail your resume to raymorevc@gmail.com or apply in person with your resume at: Raymore Veterinary Center

411 Remington Plaza Ct.

Raymore, MO 64083 No phone calls please Job Type: Full-time

Education: High school Diploma or GED (Required)

Experience: Preferred but not required

Physical Requirements: Be able to operate in a busy clinic environment, handle and restrain animals as needed and be on your feet all day. Must be able to lift 50 pounds.

Office Hours: 8:00 am – 6:00 pm Monday through Friday and 8:00 am – 12:00 pm Saturday.

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May 27, 2020

HOPE Inc., a low-cost spay and neuter clinic located in Leavenworth, Ks is seeking a veterinarian to perform surgery. Approximately 15-20 surgeries per day, 3-5 days per week. Please contact Amy @ 913-708-2210 or Don Brown @913-651-6761. Schedule is flexible. Clinic located inside Kansas Country Store.

May 21, 2020

GAGE ANIMAL HOSPITAL (GAH) – TOPEKA, KS- SEEKS PART-TIME ASSOCIATE VETERINARIAN

GAH, a premier small animal hospital in Topeka, KS, seeks part-time associate veterinarian. Twenty hour work week. Flexible schedule. No after hours emergencies. Digital radiography, dental digital radiography, ultrasonography, electronic records, etc. Fear Free. Spacious facility. Generous benefits. Thirty minute commute to Lawrence, or live in Topeka. New graduates/experienced veterinarians encouraged to apply. Call 785-272-8876 or email info@gageanimalhospital.com for more information. HEALTH SAFE ENVIRONMENT

May 21, 2020

GAGE ANIMAL HOSPITAL (GAH) – TOPEKA, KS- SEEKS FULL-TIME ASSOCIATE VETERINARIAN

GAH, a premier, small animal hospital in Topeka, KS, seeks full-time associate veterinarian. Digital radiography, dental digital radiography, ultrasonography, electronic records, etc. Spacious facility. Fear Free. Generous benefits. 30 minute commute to Lawrence, or live in Topeka. New graduates/experienced veterinarians encouraged to apply. Should have basic surgical skills, or desire to learn. \$90,000, plus productivity. 40 hour work week. No after hours emergencies. Call 785-272-8876 or email info@gageanimalhospital.com for more information. \$10,000. signing bonus for two year contract. HEALTH SAFE ENVIRONMENT

May 18, 2020

Veterinarian wanted: Excelsior Springs Animal Clinic in historical Excelsior Springs, MO. 2 doctor small animal clinic practicing high quality medicine-digital radiographs, ultrasound (with ultrasound trained veterinary technician on staff), in house blood machines, dental radiography, cold laser therapy, full anesthetic monitoring, etc. Family oriented with a small town feel. Strong emphasis on continuing education, paid CE/licensing fees, 4.5 day work week with no after-hour emergencies, ample vacation time, health insurance opportunities, practice your own medicine! Experience preferred but new graduates encouraged to apply! Visit us on Facebook-Excelsior Springs Animal Clinic. Contact Practice Manager Diane Lowery at (816)637-5612 with questions. Resumes can be emailed to ExcelsiorSpringsAnimalClinic@gmail.com.

May 18, 2020

Raymore Veterinary Center is a small animal practice in Raymore, MO, a suburb just south of Kansas City, MO. We are a busy 3 doctor practice. Our hospital is growing rapidly and we are in need of additional veterinarians. Our hospital has been established in our community for more than 15 years. We treat each patient and their family as our own family. We have a seasoned and experienced staff, because this is a great place to work! Our team is progressive and dedicated to constant improvement. We like to go above and beyond to provide the absolute best care for our patients and their families.

Raymore is about 20 minutes from downtown Kansas City and 45 minutes from Truman Lake and other great outdoor activities.

Raymore Veterinary Center offers:

Generous compensation package

Flexible work schedule

Continuing education allowance

In-house Idexx laboratory equipment, digital radiographs, IM3 dental unit, laser surgical unit.

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Easy referral to multiple 24-hour emergency and specialty facilities in the area.

We have a caring and supportive staff and you will work side-by-side other veterinarians daily. We foster a strong collaborative work environment.

Beautiful, updated and CLEAN facility. We have five exam rooms, a separate surgical suite. Our treatment area is spacious with a dental table and a treatment tables in addition to runs and cat-friendly condos for our patients.

We are flexible and would welcome full or part time applicants of any experience level.

Contact Shane Brookshire, DVM (MU '97) for more information. 816-331-2626 or raymorevc@gmail.com