

In This Issue:

- SCNAVTA Supports North Bay Fire Victims
- Ringworm Exposed
- Can You Say "Coccidioidomycosis"?
- Eye Care: A New Perspective on Veterinary Ophthalmology
- Cannabis for Pets
- Another SASD success!

Foothill SCNAVTA aids in efforts to support the North Bay Fire Victims

By: Kelsey Hodge

When news about the North Bay fires spread across the Bay Area and the nation, donations almost immediately began rolling in. Within days people were organizing food and clothing drives, fundraisers, and GoFundMe accounts for those who lost everything. The Foothill College Veterinary Technology program was no different. Naturally, many of the students began to worry about the pets, shelter animals, and the wildlife that had been displaced by these fires, and started coming up with ideas of how to help. That is where the Foothill Student Chapter of NAVTA (SCNAVTA) came in to spearhead the effort.



Members of SCNAVTA started doing research on what kind of donations were most needed to help animals. Many shelters, rescues, and organizations were called, and the general consensus at the time was that money was the most needed form of donation. So, SCNAVTA started a fundraiser to collect money that would be appropriately donated, as well as a collection of goods related to animals that would be needed in a few weeks' time after current resources had run out. Together with their communities, the club members raised more than \$1500 and amassed over five cars full of goods such as food, bedding, treats, toys, crates and more in just over two weeks. President of SCNAVTA Hannah Greenspan and club members Lis Pullin, Genevieve Walker, Steph Case and Danielle Dittman personally drove to the North Bay area to deliver donations. First, they were greeted at



DITCH THE STRAW

Plastic drinking straws are in the top 10 items picked up off beaches on Coastal Cleanup Day. Ask for drinks without plastic straws to reduce waste and prevent the plastic from ending up on beaches.

Love drinking out of straws?
Use reusable bamboo or [metal straws!](#)



Petaluma Animal Services Foundation by one of the co-founders of the shelter, Valerie. This shelter is only about 15 miles from the Santa Rosa fire, and was taking in most of the displaced animals from the area. SCNAVTA donated \$1,000 along with an abundance of supplies to the foundation. While there, the team received a tour of the facilities from Valerie and connected to the effects of the disaster on a personal level. They even got to help with the intake of 5 bottle baby kittens that are now growing to be healthy and strong. The second stop was the Bird Rescue Center in Santa Rosa, where the team delivered a donation of \$350, and got to meet some of the resident birds including an owl and a peregrine falcon.



The passion and motivation of the students in the Foothill Chapter of SCNAVTA to help animals contributed greatly to the success of this fundraiser, all driven by the goal of helping those in need. The students felt a sense of pride and selflessness in their duty to animal welfare. These feelings were further acknowledged when they received a letter from the Petaluma Animal Services Foundation personally thanking SCNAVTA for their donations. The letter also came with an invitation for students to come help at the shelter any time, which will be an opportunity happily taken by these future veterinary technicians.

Trivia Time

The peacock mantis shrimp can throw a punch at 50 mph, accelerating quicker than a .22 caliber bullet



Studies have shown that wild chimps in Guinea drink fermented palm sap, which contains about 3% alcohol by volume

Capuchin monkeys urinate on their hands to wash their feet



Sea otters hold hands while they are sleeping so they don't drift apart

Prairie dogs say "Hello" by kissing



Ringworm Exposed

By: Richard Nguyen

The Foothill Veterinary Technology Program hosted the first seminar of the academic year on October 4 in the VT Lab on the topic of ringworm in the shelter setting. Laura Mullen, the SPORE director of the SF SPCA, led the discussion and presented a summary of ringworm from her 15 years of experience and how her work with the SPORE Program has affected shelter medicine. SPORE stands for Shelters Preventing Outbreaks of Ringworm through Education, and Laura's seminar was a perfect example of SPORE in action.

Ringworm is a familiar fungal infection to the veterinary field, but there are common misconceptions to how it is viewed. Most people fear a ringworm diagnosis, but

Laura spoke to its highly detectable and treatable nature. Ringworm, medically known as dermatophytosis, is an infection by one of three fungal species: *Microsporum canis*, *Microsporum gypseum*, and *Trichophyton mentagrophytes*. Of these three, *M. canis* is the most common and it is the species that fluoresces under a Wood's Light. The infection is mostly seen in younger animals, especially kittens, with immature immune systems and will often present as circular patches of alopecia that expand outward as the dermatophyte consumes the keratin in the hair and the hairs fall off. What is seen under a Wood's Light is a metabolite left by the fungus before the hair has fallen off. Therefore, Laura argued that the misconception that a Wood's Light only rarely finds a ringworm infection is due to user error, which can be avoided by allowing time for the examiner's eyes to adjust to the darkness most conducive to a Wood's Light exam and by being extremely thorough in examining the cat's entire body with the Wood's Light.

Additional tests to run to confirm a ringworm diagnosis are direct exams of fluorescing hairs under a microscope and fungal cultures using a toothbrush sampler. A direct hair exam simply consists of taking hairs that fluoresce under a Wood's Light and examining



Bringing Home a New Dog or Cat

By: Jessica Brody

Bringing a new cat or dog into your home can be both exciting and challenging. But like any new relationship, it takes time. Once you and your new pet get over the first-time jitters, Fluffy or Fido could become one of your best friends. Whether it's adopting a rescue dog or cat or buying a new 'doggie in the window,' first-time pet owners will need to make sure their new addition will be happy in their home.

Adopting a new cat

Cats are independent, which might appeal to professionals with a busy schedule. You will need to make appointments for your feline to be immunized and neutered, as soon as age permits. Spaying or neutering your cat will prevent your cat from urine spraying your furniture or fighting with other neighborhood cats.

Buying a pet also means shopping. You will need to buy quality litter and a litter box. Covered litter boxes provide your cat with privacy, and clumping litter is easier to maintain. It's ideal to keep the litter box clean for your cat and your nose. Cats love to play, so pick up a few toys such as feathers, balls and catnip at the pet store. Catnip and other freeze-dried treats may serve as bribery and training.

New cat owners also may want to invest in a scratching post to prevent Fluffy from destroying a new sofa or plush chair. It is recommended that you place the kitty's scent on the cat tree by gently stroking its cheeks with a towel and then rubbing the scratching post with the towel. This method will encourage your new cat to use the post.

them in oil under a microscope. Infected hairs appear swollen, irregular, and frayed. The ideal fungal culture improves upon the flaws seen with the classic DTM cultures, which sample hairs from the edges of alopecia that can lead to false negative because most



affected hairs will have fallen off and no spores will be present. A flat culture dish is chosen to provide the most surface to grow and to quantify the fungal growth in a systematic fashion. The sampling should be done with a toothbrush to brush through the hairs for fungal spores, rather than just using hairs plucked from lesions. The brushing and the placement of the samples onto the culture plate are done in a consistent manner so interpretation

parameters can be established across plates.

Once the ringworm is diagnosed, treatment follows a course of lime sulfur dips and oral itraconazole. However, diagnosing and treating ringworm often intimidate shelters because it is a time- and labor-intensive process. Laura shared that at the SF SPCA, there is a sign up for a waiting list to admit patients to the SF SPCA specifically for ringworm, which led her to develop ways for shelters to begin treatment themselves for the benefit of their patients. With the goal of only placing truly positive cats in isolation, shelters should examine the environmental cleanliness of the facility to minimize any contamination risks. Doing a full physical exam and conducting the three tests for diagnosing ringworm are possible in a shelter setting, especially through setting up in-house incubators so the fungal cultures do not have to be sent out. Laura advocated a partition system for housing potentially infected patients based on exam findings: negative, positive where the cat is placed in isolation and treated, and observation where the patient is housed and treated while fungal cultures are run to determine if the patient just had exposure to ringworm or if the patient is truly infected.

Most importantly, Laura left with a message that ringworm is just an infection, not a death sentence. There is a standard for diagnosing, a standard for treatment, and all of it is worth 18 years of love with the cat.

What's up, dog?

Preparing your home for a puppy or dog takes time and care. You will need to stock up on supplies such as a crate, food and water bowls, a collar and leash, possible baby gates, chew toys and a bed.

Give your dog a tour of your home and backyard on a leash, but only use body language or simple sounds. Your dog will be overwhelmed by its new surroundings and these small signals will allow your pet to focus on you. Make sure to provide food and water and spend time with your new pet to reduce the stress of a new environment. It's also best to pick a temporary, gated-off room, such as a kitchen that may have easy-to-clean floors and allows your dog to be the center of attention.

This gated-off space will train Fido to stay away from unwanted areas. Be sure to keep your pooch away from areas that have chemicals and certain plants in your home.

Obedience school is a great way to bond with your dog. Expert training will help you to raise a happy, safe dog. Dog training is unregulated, so you will have to do some research in your area to find the best teacher.

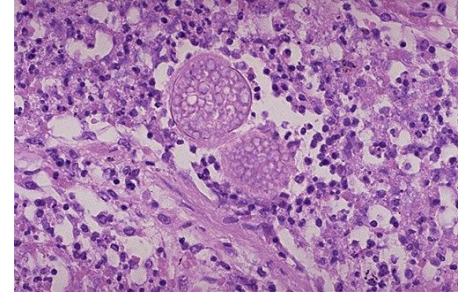
It is important to get your dog or cat a license or have it microchipped in case it ever gets lost. Check out your local animal care and control for more information.

While cats may not mind alone time (in fact, they may prefer it), dogs can get lonely throughout the day, particularly if you work long hours. Consider hiring someone to drop in for a playful visit with your pup and take him or her for a walk to break up the quiet time, which can be especially tough during the 'getting to know you' stage.

Can You Say "Coccidioidomycosis"?

By: Maya Seraphin, CVT

This disease, commonly called valley, desert, or San Joaquin Valley fever, is an infection caused by the fungus *Coccidioides*. Generally found in the southwestern United States, Mexico, and parts of Central and South America, the fungus infects



both human and animal patients. Transmission is only via inhalation of the airborne spores. Once the fungus enters tissues, it changes form and cannot be spread from patient to patient.

Most people and animals that spend any amount of time in dry desert areas will have exposure to this fungus, but will not suffer serious illness. Symptoms include fatigue, lack of energy or appetite, weight loss, fever, and coughing and will often resolve over time. Testing for the disease involves checking for antibodies in the patient, and if present, performing a titer to quantify the amount of antibody produced. Initially, the disease infects the lungs, so in addition to general blood tests, a chest radiograph may indicate infection. In more serious cases, the fungus disseminates into other areas, such as skin, bones, joints and brain meninges, so additional radiography and tissue biopsies prove helpful.

Treatment of valley fever is based on administration of antifungal medications from the -zole group, e.g. Fluconazole (Diflucan), Itraconazole (Sporanox), or Ketoconazole (Nizoral). If an animal is sick enough to seek veterinary consultation, treatment is usually longterm, sometimes even lasting for the lifetime of the patient. As with any medication, there are side effects, and cost is often prohibitive for pet guardians, leading to the decision to euthanize. Supportive therapy, such as treating other concomitant conditions and feeding high quality, palatable food, is important.

Prevention is difficult, unless you avoid breathing in areas where the fungus grows! Exciting news appeared just a few months ago, however: the University of Arizona in Tucson, Arizona received a \$4.8 million grant from the National Institutes of Health to bring a

vaccine to market, possibly in as little as five years. Dogs will be the initial target group for the vaccine, but humans will eventually benefit also.

University of Arizona fungal geneticist Marc Orbach invented the live attenuated delta-CPS1 vaccine by studying Cornell University research about what gene makes fungal disease in corn pathogenic. After finding a very similar gene in the valley fever fungus, Orbach created a mutant spore by splicing out that gene. A patient's body recognizes the mutant spore as "authentic" enough to create antibodies, but does not suffer symptoms of the disease. As with any other live vaccine, the risk of actually developing the disease against which immunity is sought exists, but safety data on delta-CPS1 is promising. However, research so far has only involved inoculation of mice.

As an article in the Arizona Daily Star stated, "Politics and funding are problems for getting any valley fever vaccine to market because it is a regional, not national, disease. In humans it affects fewer than 200,000 people per year, which gives it "orphan" status. That also means it's harder to get drug companies interested." This recent grant will certainly improve efforts in preventing coccidioidomycosis in the thousands of pets and people suffering from this insidious infection.

For more information, check out these websites:

- <http://vfce.arizona.edu/valley-fever-dogs>
- <https://www.cdc.gov/fungal/diseases/coccidioidomycosis/index.html>
- http://tucson.com/news/local/university-of-arizona-gets-million-federal-grant-to-develop-valley/article_e373b657-adc7-536e-97dd-fa2940c20a59.html?utm_medium=social&utm_source=email&utm_campaign=user-share

Foothill Students Take a Behind the Scenes Tour of Six Flags and Meet the Animals At Palo Alto Junior Museum and Zoo!



Eye Care: A New Perspective on Veterinary Ophthalmology

By: Julia Chaney RVT/LVT

Being passionate about a career is more than just showing up every day and punching a timeclock in order to get paid. When you find a career you're passionate about, you can't help but try to learn everything you can about your field: vocabulary, clinical signs,



diagnoses and corresponding therapies, instruments to name a few.

My area of interest lies within the scope of ophthalmology. Over the course of the past year, in partnership with my veterinary ophthalmologist and mentor, I have been able to start developing a deeper understanding of the skills and processes available to ophthalmologic professionals. My learning ranges from recognizing clinical signs of common eye-related ailments and anticipating the corresponding treatments and therapies, to instrument maintenance, sterilization and use, to working efficiently around the high-tech, very expensive equipment. Most, if not all, of the equipment we use on a day to day basis is the same or very similar to what ophthalmologists in human medicine use: tonometers, slit-lamp microscope, ophthalmoscope, etc. The biggest differences between human and veterinary

ophthalmology is the restraint techniques since pets have a difficult time understanding

how to "put their chin on the rest."

The operating microscope (affectionately referred to throughout our hospital as the "Ferrari") is one of the most fascinating and by far the largest tool that we use in ophthalmology. Without the large



operating microscope, we wouldn't be able to perform the surgeries needed to restore or save a patient's vision. The detail and the magnification that is displayed on the available screens can bring to

CaRVTA Symposium 2018



Sunday, February 25, 2018

8:00am-5:00pm

At Foothill College

<https://carvta.com/event-2749269>

Registration:

CaRVTA Member ONLY - before 1.1.2018 – \$25.00

CaRVTA Members ONLY Jan 1 to Feb 21 2018 – \$45.00

NON-Members - before 1.1.18 – \$70.00 (This INCLUDES a CaRVTA MEMBERSHIP!)

NON-Members after Jan 1, 2018 – \$90.00 (This INCLUDES CaRVTA MEMBERSHIP!)

life the ocular anatomy from those A&P textbooks. I have seen red blood cells flowing through vascularization brought on by chronic corneal inflammation and I've seen sight restored to patients previously blinded by cataracts!

One of the most important resources available to veterinarians, specialists or not, is the veterinary technician. Technicians who have the passion and determination to do whatever it takes to be the best at their job are vital to providing the best patient care, stellar client communication, and ultimately the clinic's bottom line. I'm not limiting this to technicians who have or are pursuing a VTS designation in a specialized field. General practice veterinarians need good veterinary technicians, too! As I continue to work toward being the best veterinary technician I can be, I have adopted a quote from Walt Disney as my mantra: "Keep moving forward!"

Cannabis for Pets

By: Gary Richter, MS, DVM

As more and more people discover the benefits of medical cannabis for themselves, many pet owners are wondering if there are similar benefits for their furry family members. As it turns out, the use of cannabis in animals is nothing new. Cannabis has been used in veterinary medicine for nearly as long as humans have used it to treat common health issues.

More recently, veterinarians have rediscovered the values of cannabis to treat many of the same medical conditions in pets that humans benefit from medical cannabis use. Pets suffering from pain, inflammation, arthritis, cancer, seizures, digestive issues have all found relief, and cannabis even has documented anti-cancer effects.

Cannabis affects our bodies and those of our pets because we have something called the endocannabinoid system (ECS). One of the fascinating things about the ECS is how it appears to be "designed" to interact with cannabis. Two of the main active compounds found in cannabis, THC (tetrahydrocannabinol) and CBD (cannabidiol), are very similar to the natural chemicals within the body that control the ECS. THC and CBD are so similar to those natural chemicals that they are able to affect how the body functions by binding with ECS receptors.

While the use of cannabis products containing THC and CBD can have great medical benefits, dogs and cats are easily overwhelmed by excessive amounts of THC. While rarely fatal, dogs and cats overdosed with THC may become unresponsive, lose bowel and bladder function, and be unable to eat or drink. Veterinary care is frequently required to support these pets until the symptoms subside.

Unlike THC, there are no concerns regarding toxicity or overdose from medicine containing predominantly CBD. Legally speaking, hemp is cannabis that contains less than 0.3% THC (anything over 0.3% is defined as marijuana). CBD-dominant medicines are safe and effective and when derived from hemp are completely legal in all 50 states without a prescription.

The CBD in hemp is the same compound found in marijuana.

While there are uses for medical cannabis that require THC, CBD-based products are highly effective for a wide range of conditions affecting dogs and cats and have an equally wide margin of safety.

For pet owners who live in states without medical or recreational marijuana laws, access to products and/or veterinary guidance may be difficult to come by. In these cases, an excellent place to start is with products made from high quality hemp. Hemp-based CBD products have the advantage of being legal to sell over the counter in all states and are safe as they contain very little THC. Thus, your pet can still benefit from CBD therapy no matter where you live.

***Due to marijuana's Schedule 1 status, veterinarians are not allowed to write letters of recommendation for their clients or tell them where to obtain cannabis medicine.

Check out this link for more info

<https://www.projectcbd.org/claws-and-effect-use-of-medical-marijuana-for-pets>

Or his book "The Ultimate Pet Health Guide: Breakthrough Nutrition and Integrative Care for Dogs and Cats" by Dr. Gary Richter M.S. D.V.M. (Author)

Foothill SCANVTA Annual Fall SASD Success

By: Dani Fernandes

On Sunday November 5th, Foothill College's Veterinary Technician Program hosted its 16th Small Animal Surgery Day (SASD). This amazing event took place from 7 am to 6 pm, and included rabbits, rats and guinea pigs; this event prepared all the animals to enter the world of adoption and find their forever homes. The rabbits came from Brenda, the head of South Bay Rabbit Rescue, and the rats and guinea pigs came from North Starr Rescue. The spays and neuters were performed by three amazing volunteer doctors; Dr. Cristi Blackwolf from Adobe, Dr. Tina Peak from Wildwood, and Dr. Shira A. Rubin (a Foothill Graduate who became a Veterinarian!). With the help of many volunteer technicians, as well as the 1st and 2nd year students of the Veterinary Technician (VT) program, the day was a complete success.



This event is a requirement for 2nd year students since it gives them the opportunity to perform in a surgical setting. They prepare the animals for surgery, administer pre-anesthetic medications, monitor vitals during the surgery, begin to learn how to monitor anesthesia from the RVTs, and handle recovery from anesthesia. Attendance for 1st year students was optional, but astoundingly, for the first time ALL of the 1st year students attended the event! The 1st years were assigned to recover the animals after the surgeries were completed; making sure their vitals continued to stay normal and stable while they came out of anesthesia. There was one rat who had a complication with her surgical site: it came open and began to bleed. With the help of Sandy and a 1st year named Stacey, they were able to close the opening and prevent any further trauma.

Spays and neuters are recommended for most domestic animals not only because it helps keep populations in check, but it helps the health of the animals. By performing these surgeries, we can prevent life-threatening diseases such as cancer. Spaying and neutering also suppresses sexually driven behaviors, such as marking or aggression. Each of these surgeries were monitored by

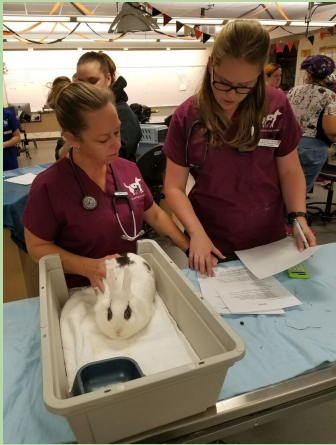


the volunteer RVTs, Foothill VT program staff, 2nd year students, and even a few of the 1st year students.

This whole event was made possible by many generous groups; longtime supporter of SASD and of the Foothill VT Program as a whole Adobe Animal Hospital, AnimalScan MRI, VCA San Carlos, and Stanford College. A special thank you goes out to all the RVTs and DVMs who volunteered their time to help further expand the knowledge of Foothill VT students, and help small animals lead longer healthier lives. Another thank you goes out to the wonderful women who brought all the animals into the care of the VT students, and to the sweet animals who helped teach our students how to work within a surgical setting. A final thank you goes to the Foothill Staff and students who worked hard to turn the chaos of SASD into an intense, fluid learning experience. The invaluable information all the students gained that day will help us in our strive to become competent and confident veterinary technicians.

Brenda from South Bay Animal Rescue had a special thank-you for the Foothill staff as well as the students:

“South Bay Rabbit Rescue wants to thank Sandy Gregory M Ed, RVT, CCRA, her staff, and students for an amazing day. We were able to photograph and ask questions while the organized chaos ensued. It was exciting to be a part of the actual procedure and to see the love and compassion everyone had towards our rabbits. That part of the job is never seen by the public and it is easy to forget that people become vets for the animals, not for the glory and money. The rabbits that were spayed by Foothill have all been adopted but one. Angel is biding her time for her perfect human. We hope that Foothill continues to invite us back to surgery days as we currently have 75 rabbits and never seem to run out of them. While others turn rabbits away, we continue to accept them. We would rather have them with us than have them dumped somewhere to have to catch them later. Thank you again Sandy and we look forward to a continued working relationship.”



Contact Us

12345 El Monte Road
Los Altos, CA 94151

gregorysandy@fhda.edu

You are receiving this email because you signed up for our newsletter.

If you wish to stop receiving further emails, please reply back to this email with the subject line **"Unsubscribe"**.