1/31/2022 2022_01_Feb



YOU Can Create Change.

Join us for one of Tucson's most beloved community events as our ten finalists share their powerful stories from right here in our community, working at the forefront of the intersectional movements for racial, economic, and social justice.

Participate in live voting for the finalists and share in the joy as each participant wins unrestricted grant prizes for their organization. Plus, double your impact, all donations made to nonprofits will be matched up to \$40,000!

The Fast Pitch Class of 2022:

- Clínica Amistad
- · Cooper Center
- · Edge High School
- · Felicia's Farm
- Florence Immigrant & Refugee Rights Project
- FosterEd Arizona
- · Goodwill of Southern Arizona
- I Am You 360
- · Power Over Predators
- · Scholarships A-Z

Tickets On Sale Now — In-Person & Virtual

Thursday, March 31, 2022 • 5 p.m. **Health Science Innovation Building**

In-Person at the UofA and Virtual Live Stream Available







Connie Hillman Family Foundation























32 DesertLeaf | February 2022

Plan of Action



Valley Fever Revisited

ince the DesertLeaf last ran a column on valley fever in dogs, in 2016, the University of Arizona's Valley Fever Center for Excellence has been continuing to develop a vaccine that will protect dogs, and ultimately humans, from the fungal infection.

Primarily a lung infection, valley fever, or coccidioidomycosis, is contracted through the inhalation of airborne particles of two species of the fungus Coccidioides. It can affect humans, dogs, cats, horses, coyotes, bats, and snakes, as well as many other animals. The name valley fever refers to the San Joaquin Valley, the initial location associated with the disease, but valley fever is endemic throughout the Southwest, from California to Texas.

The UArizona center has been working since 1996 to address the problems caused by the fungus, and once a vaccine is developed and approved for use in dogs, the next step will be to develop the vaccine for use in humans, according to Lisa Shubitz, research



scientist with the center.

In a recent study published in the journal Vaccine, the vaccine Δcps1 was found to be well tolerated in dogs and afforded a high level of protection from infection when given as two doses 28 days apart.

Dogs are more susceptible to getting infected than other domestic animals because of their intense interest in digging in, rolling in, sniffing, and eating all things smelly. According to the center's website, 6-10 percent of all dogs in Southern Arizona will eventually get sick from valley fever. According to Shubitz, the center's research findings indicate that 28 percent of dogs will be exposed to the fungus between the ages of four months and two years. Of those, 70 percent will be asymptomatic.

The publication of the recent study has generated a lot of interest, according to Shubitz.

"It's good that the NIH [National Institutes of Health] and places with public funding are willing to put some money into this, because that will allow us to get to the human vaccine as well," she says, referring to the grants that enable the studies.

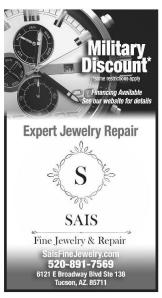
"There's not a timeline for the human vaccine," says Shubitz, noting that the costs for developing human vaccines can be 10 times greater than for canine vaccines

"So far, it is highly likely that the human vaccine will be very similar to or the same as the dog vaccine," she says.

"No vaccine is perfect," Shubitz offers, adding that while it will protect most dogs, it can't protect all of them, but this vaccine should greatly reduce continued on page 62

Most dogs, like Charlie, will never develop symptoms of valley fever.

1/31/2022 2022_01_Feb



"I can't imagine where we would be financially, mentally, and emotionally without the Ronald McDonald House." Geri, mother of Sydni







CHANGE THE LIFE OF A FOSTER CHILD **VOLUNTEER ONE DAY A MONTH**



- Review Cases of Abused and Neglected Children In Your Community
- Provide Your Recommendations to the Juvenile Court
- · Have a Meaningful Impact on the Life of a Child

Website: www.AZFCRB.org

400 W. Congress #341, Tucson, AZ 85701; Phone: 520-388-4300; Toll Free: 1-866-558-1791

Dist. 16 REPORT CARD continued | - - - - - - -

of the public who wish to speak during the Public Comments portion of the agenda can do so by completing a Google Form that will be made available on the streaming link in the half hour preceding the start of the meeting. The agenda, which includes information on how to access the stream, is posted at least 24 hours in advance of the meeting on the district's website, cfsd16.org,

in the Governing Board section under the "About Us" tab.

David Hatfield is a local freelance writer. His three children graduated from CFSD, and he has served on the Catalina Foothills School Board. Comments for publication should be addressed to letters@desertleaf.com.

PLAN OF ACTION continued | - - - - - - - - - - - -

the financial burdens dog owners face for the current costs of treatment for valley fever, which can run into the thousands of dollars.

Treatment methods and medicine doses for valley fever in dogs are still being refined, and, Shubitz points out, more funding is being dedicated to pinpointing the ideal levels of medication: "We're launching a project in collaboration with UC Davis Veterinary Medicine to learn how efficacious drugs are at treating valley fever by using the internet and enrolling the dogs through their owners and not their veterinarians, because veterinarians are so busy as it is. The owner fills in the relevant information, and we follow up monthly for the next year to 18 months to find out how long the recovery took and what medications and dosages were used.

"I think this is a cool little project," Shubitz says of the study dubbed WOOF, Web-Based Observations, Outcomes and Findings.

"We came up with this idea because of a study that a professor from the University of Minnesota conducted directly with high-risk medical professionals taking hydroxychloroquine," says Shubitz. The research found the malaria drug provided no protection against COVID. "Without COVID, nobody would have ever thought of doing a study this way.

"There are some drawbacks: your data might not be rock solid, but it makes a previously impossible study possible. Then, you can analyze your data later and toss the insufficient data. And we can get out of Arizona, reaching into California and Texas without the travel expense," notes Shubitz.

"There continues to be lots of interest," says Shubitz of the local support for the center's research. "The private donations allowed us to collect a lot of preliminary data, and that aligned us to be competitive for that [NIH] grant." The resulting \$4.8 million awarded in 2017 helped produce the vaccine for use in dogs.

"That is the steppingstone for the development of the vaccine in humans," Shubitz explains. "The vaccine in humans is heavily reliant on the success of the vaccine in dogs."

According to UArizona Health Sciences, Anivive Lifesciences will register the new vaccine with the US Center for Veterinary Biologics for use in dogs and will work with Crozet BioPharma on developing the vaccine for humans.

The safety study for the valley fever vaccine for dogs is likely to be conducted in late 2022 and early 2023. Interested dog owners can register online and find other resources for valley fever at vfce.arizona.edu.

Claire Rogers is a local freelance writer. Comments for publication should be addressed to letters@desertleaf.com.





62 DesertLeaf | February 2022