



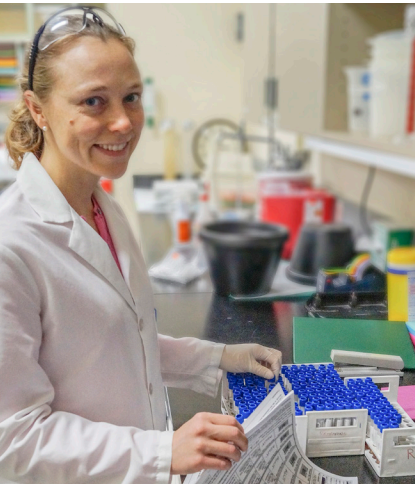
UC DAVIS

VETERINARY MEDICINE

California Animal Health and
Food Safety Laboratory System

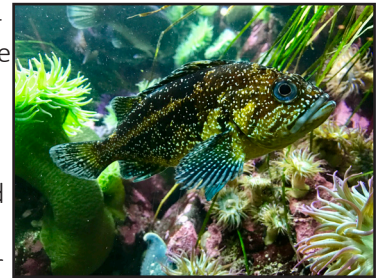
CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY • DECEMBER, 2020



Aquatic Animal Diagnostic Services at CAHFS

As part of CAHFS' dedication to providing the highest quality laboratory support services for animal health and disease diagnostics, we offer a wide variety of diagnostic services for aquatic species (aquaculture, public viewing, hobby), including necropsy, histopathology, bacteriology, virology, parasitology and toxicology. Specimens for necropsy should preferably be submitted directly to the San Bernardino lab, where necropsies are performed, in order to preserve their freshness. However, if necessary, submissions can be made to any of the CAHFS labs where they will be re-routed to the San Bernardino laboratory. If possible contact the lab by phone or e-mail before submission to discuss the best samples to submit.



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New Residents in Anatomic Pathology & Avian Medicine

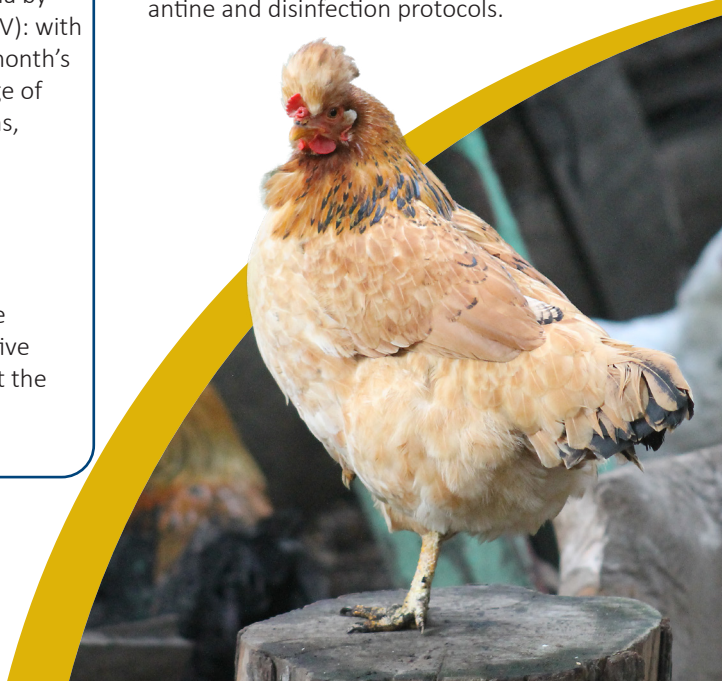
CAHFS is pleased to welcome Dr. Nicolas Streitenberger and Dr. Shayne Ramsubeik as residents in Anatomic Pathology (San Bernardino lab) and Avian Medicine (Turlock lab), respectively.

Dr. Streitenberger received his DVM degree in 2012 and completed his PhD earlier this year, both from National University of La Plata, Argentina. Dr. Streitenberger was awarded the Davis/Thompson Foundation's Best Diagnostic Exercise (2019-20) award for his work on "Bovine Bronchopneumonia by Bovine Respiratory Syncytial Virus (BRSV): with Secondary Bacterial Infection" at last month's annual meeting of the American College of Veterinary Pathologists. Congratulations, Nicolas!

Dr. Shayne Ramsubeik received his DVM degree in 2009 from the University of the West Indies, Trinidad and Tobago. He recently completed the requirements for a Master's of Preventive Veterinary Medicine (MPVM) degree at the University of California, Davis.

Fish

Disseminated mycobacteriosis was the cause of exophthalmos, bloated abdomen, skin discoloration, and difficulty regulating buoyancy in mosquitofish (*Gambusia* spp.). The fish submitted for necropsy had pinpoint white foci in liver and kidney. Histopathology revealed multiple granulomas containing numerous acid-fast bacilli compatible with *Mycobacterium* spp. in multiple organs including the eye, brain, pseudobranch, heart, liver, spleen, kidney, intestine, mesentery and ovary. All species of fish are susceptible to mycobacteriosis, though some species are at a higher risk than others. There is no effective treatment or vaccine, and prevention is by use of quarantine and disinfection protocols.





Lab Locations:

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Bovine

Metritis, pyelonephritis, and nephrolithiasis were diagnosed in a 5-year-old Jersey cow that died suddenly 2 weeks postpartum. The stones were composed primarily of magnesium calcium phosphate carbonate, and a small amount of struvite. These stones form as a consequence of urinary tract infection with urease producing bacteria. In this case, *E. coli* (not a urease producer) was cultured from the uterus; kidney cultures were not performed. Compositional analysis of the kidney stones is important when making recommendations for prevention, given that many stones have a similar appearance but different predisposing factors.

Equine

Unilateral nodular dermatosis (also known as unilateral papular dermatosis) was diagnosed in a 20-year-old draft horse gelding with asymmetric distribution of lumps on the shoulder and neck. The etiology of this condition is unknown, but it appears to involve insect hypersensitivity. The unilateral distribution suggests direct contact with an ectoparasite that may be living in the bedding rather than insect bite.

Small ruminants

Bluetongue virus (BTV) infection was detected in a 7-year-old pregnant ewe found recumbent in the field and unable to stand. The ewe, from a flock of 150, was underweight and had derma-

titis with vasculitis on all legs, heart degeneration and esophageal erosions and ulcers compatible with a BTV infection. The BTV PCR was positive on the spleen. The ewe had concurrent mild abomasal parasitosis, moderate copper deficiency and a focal *Corynebacterium pseudotuberculosis* lung abscess.

Poultry and Other Avian

West Nile virus (WNV) infection was diagnosed in three lineolated parakeets (*Bolborhynchus lineola*) in Southern California that had a history of lethargy and anorexia before death. Histology was suggestive of this disease, and consisted of inflammatory infiltrates in heart, spleen, liver, and kidney. Diagnosis was confirmed by WNV qRT-PCR on kidney and by the demonstration of WNV antigen in multiple tissues by immunohistochemistry. WNV is a zoonotic disease mainly transmitted by mosquitoes. This disease is a threat to several mammalian and avian species. Psittacines and other exotic pet birds are also at risk, especially if they are housed outdoors.

Poultry App Now Available

A new poultry app, **Backyard Poultry Central**, is now available on Google Play for Android users with a home screen in both English and Spanish.

The app, developed by UC Cooperative Extension, is to help backyard and game bird owners stay up-to-date on best poultry practices, new research, and disease outbreak information.

Holiday Schedule

In observance of the University of California's winter holidays, CAHFS will be open with limited services on Thursday, Dec. 24, 2020; accepting submissions from 8 am-noon. CAHFS will be closed on Friday, Dec. 25, 2020.

CAHFS will be open with limited services on Thursday, Dec. 31, 2020; accepting submissions from 8 am-noon and closed on Friday, Jan. 1, 2021 in observance of the New Year's holiday.

