



UC DAVIS

VETERINARY MEDICINE

California Animal Health and Food Safety Laboratory System

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY • DECEMBER, 2016



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HOLIDAY CALENDAR

In observance of the University of California's winter holidays, CAHFS will be closed on Monday, 12/26/16 and Monday, 01/02/17.

CAHFS will be open, but have limited services on Friday, 12/23/16 and Friday, 12/30/16.

CAHFS WELCOMES NEW DIRECTOR

Dr. Pamela Hullinger, the newly appointed director of the California Animal Health & Food Safety Laboratory System (CAHFS), assumed her duties on November 15, 2016. Prior to this appointment, Dr. Hullinger served as the Large Animal Clinic Director of the William R. Pritchard Veterinary Medical Teaching Hospital at UC Davis.



Pamela J. Hullinger

Dr. Hullinger, a board certified specialist in veterinary preventive medicine (2001), graduated with a DVM (1990) and Master of Preventive Veterinary Medicine (2001) from UC Davis. After working in private large animal practice, she completed a residency in equine medicine at UC Davis in 1996. Subsequently Dr. Hullinger worked as a veterinary medical officer for the California Department of Food and Agriculture and as Chief Veterinary Officer at the Lawrence Livermore National Laboratory (LLNL) – a position she still holds with active grant support for work on foreign animal disease (FAD) related projects. At LLNL, she led programs focused on FAD epidemiological modeling, and the development of novel pathogen sample collection and testing methodologies for USDA Veterinary Services and the Department of Homeland Security. Working with academic teams at Iowa State University and the University of Minnesota, Dr. Hullinger helped develop, socialize and implement the national Secure Milk Supply plan for USDA.

Dr. Hullinger has a record of scholarship in infectious diseases, notably equine arteritis virus, West Nile virus in horses, and foot-and-mouth disease (FMD). She has extensive experience in FAD response efforts, most notably exotic Newcastle disease in poultry and FMD. Previously she served on the Board of Directors of the US Animal Health Association (USAHA), and has extensive committee service with USAHA, the National Institute for Animal Agriculture, the American Veterinary Medical Association, and the California Veterinary Medical Association.

Two CAHFS faculty recognized for contributions

Congratulations to Dr. John Adaska, CAHFS-Tulare Branch Chief and Dr. Francisco Uzal, CAHFS-San Bernardino Branch Chief, who were both recognized in October for their efforts in their respective fields.

Dr. Adaska received the E.P. Pope award, the highest award given by the American Association of Veterinary Laboratory Diagnosticians (AAVLD), at their annual meeting held in Greensboro, NC. Dr. Adaska was recognized for his service on many AAVLD committees and, most recently, as the Secretary-Treasurer and member of the Executive Committee.

His extensive and successful lobbying efforts for the National Animal Health Laboratory Network were also acknowledged.

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Dr. Uzal received the lifetime achievement award from the Hispanic Engineer National Achievement Awards Conference (HE-NAAC) – Great Minds in STEM, for his work promoting the teaching of veterinary pathology to young veterinarians all over the world. Dr. Uzal is renowned for his research on clostridial diseases; his research has given veterinarians and livestock producers around the world a better understanding of these diseases, having a significant impact on food chain safety in countries across the globe.

Bovine

Blackleg was diagnosed in a 6-month-old Angus calf from a herd where 16 calves had died suddenly over a 5-day period. Necropsy revealed necrotizing myositis affecting heart, diaphragm and shoulder muscles. *Clostridium chauvoei* was isolated from these tissues confirming a diagnosis of blackleg, a disease against which the animals were not vaccinated. Lesions in the heart are common in blackleg cases and they can be observed with or without skeletal muscle lesions.

Small ruminants

Trueperella pyogenes valvular endocarditis, embolic pneumonia and hepatitis were diagnosed in a 4-month-old La Mancha wether goat with clinical signs of recurrent fever and lethargy that did not respond to aggressive antibiotic treatment. Vegetative valvular endocarditis usually occurs secondary to infections such as rumenitis, navel infection, foot or liver abscesses, or other septic processes. This goat also had copper deficiency, which can contribute to ill-thrift and decreased resistance to disease.

Equine

Colitis due to Clostridium difficile was diagnosed in a 3-year-old Quarter horse gelding. The horse had been euthanized due to catastrophic bilateral patella fractures, consequence of trauma, and the colitis was an unexpected necropsy finding. The major predisposing factors for *C. difficile* infections are hospitalization and antibiotic treatment. The latter was the most likely predisposing factor for the colitis in this horse.

Poultry and Other Avian

Tracheal aspergillosis was diagnosed in a flock of 3-week-old replacement pullets. The flock showed an increase in mortality after a windy weekend. At necropsy, the birds exhibited cyanotic beaks, small, yellowish, raised nodules on the tracheal mucosa (which was also hemorrhagic), and congested lungs, kidneys and liver. Microscopically there was fibrino-necrotic tracheitis associated with large numbers of septate fungal hyphae. *Aspergillus fumigatus* was isolated from several tracheas.

Colibacillosis caused increased mortality in a house of 9-week-old turkey hens. At necropsy, affected birds had pericarditis, perihepatitis, air sacculitis and fibrinous pleuritis. Large numbers of *Escherichia coli* were isolated from the heart, liver, air sacs and lungs. It was found that the water chlorine pump had failed, resulting in delivery of untreated water to the birds. In addition, evidence of hemorrhagic enteritis virus was detected, which results in transient immunosuppression predisposing birds to infections such as colibacillosis.

