

CAHFS CONNECTION

LEADING DIAGNOSTICS NATIONALLY, PROTECTING CALIFORNIA LOCALLY JANUARY, 2023



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CAHFS will be closed on Monday January 16 in observance of Martin Luther King Day

Happy retirement Dr. John Adaska!

Dr. John Adaska is retiring from CAHFS as of January 2023 after 26 years of dedicated service to the Laboratory System and the State of California. Dr. Adaska joined CAHFS as a diagnostic pathologist in 1996, and worked at the Tulare branch during his entire career with the laboratory. At Tulare, John became an expert in bovine pathology, and his advice was and still is sought by producers, clinicians and pathologists nationwide. John has always shown strong leadership, as Branch Chief of the Tulare branch from 2014 until 2022, and as one of the three co-Directors of CAHFS from 2019 until 2021. He had many other responsibilities both within and outside CAHFS and UC Davis, including leading the effort for the construction of the new "Alex Ardans Laboratory" in Tulare, which was completed in 2016, and being the Secretary Treasurer of the American Association of Veterinary Laboratory Diagnosticians. Thank you John and happy retirement! You will be missed.





Welcome Dr. Wendi Jackson!

Dr. Wendi Jackson is joining CAHFS as the section lead for Immunology & Epidemiology. Prior to veterinary school, Dr. Jackson completed BS and MS degrees in Animal Sciences with specific focus on dairies. After completing her DVM, she spent four years in private practice before completing MPVM and PhD (Epidemiology) degrees, both focused on livestock infectious diseases. Most recently, Dr. Jackson served as a Veterinarian Specialist with CDFA's Antimicrobial Use & Stewardship branch.

Bovine

Frothy bloat was the cause of death of a 14-month-old Angus steer that was found dead one hour after being fed alfalfa hay. The rumen was massively dilated and full of gas, frothy fluid, large amounts of wet and lush roughage, and a 1.3 kg segment of rope. Frothy fluid was also found in the reticulum and abomasum. Petechial hemorrhages in multiple head and neck sites were compatible with high abdominal pressure preventing blood return to the heart, and causing hypoxia.

Klebsiella mastitis was the cause of death of a 4-year-old Holstein cow shortly after she was vaccinated and received intramammary dry treatment. *Klebsiella pneumoniae* was isolated from all four mammary gland quarters. The skin over part of the udder was mottled red/purple, the mammary gland of three quarters was firm and mottled red, and two quarters had purulent, friable material within the teat cistern.



California Animal Health and Food Safety Laboratory System

Lab Locations:

CAHFS – Davis

University of California 620 West Health Sciences Dr. Davis, CA 95616 Phone: 530-752-8700 Fax: 530-752-6253 daviscahfs@ucdavis.edu

CAHFS – San Bernardino

105 W. Central Ave. San Bernardino, CA 92408 Phone: 909-383-4287 Fax: 909-884-5980 sanbernardinocahfs@ucdavis.edu

CAHFS – Tulare

18760 Road 112 Tulare, CA 93274 Phone: 559-688-7543 Fax: 559-688-2985 tularecahfs@ucdavis.edu

CAHFS – Turlock

1550 N. Soderquist Road Turlock, CA 95380 Phone: 209-634-5837 Fax: 209-667-4261 turlockcahfs@ucdavis.edu

Contributors

Javier Asin Patricia Blanchard Peter Chu Omar Gonzales-Viera Ashley Hill Melissa Macias-Rioseco Aslı Mete Shayne Ramsubeik Francisco Uzal

Equine

Severe **hepatitis due to** *Campylobacter jejuni* was the cause of death of a 3-year-old gelding that had been losing weight for several weeks. The animal also had severe lymphoplasmacytic enterocolitis. The *C. jejuni* isolated from the liver possibly came *via* an ascending infection from the small intestine. Significant bile duct reaction was also present in the liver, suggesting that this animal may have been suffering chronic liver disease, the etiology of which was not determined, although exposure to pyrrolyzidine alkaloids was suspected.

Small Ruminant

Endometritis with secondary peritonitis was diagnosed in a La Mancha goat that delivered three dead kids after spending two days in labor. The doe failed to pass the placenta, developed fever one day postpartum, and died two days later. On necropsy, abundant fibrino-purulent material was present in the uterus and in the abdominal cavity, and mixed bacteria were isolated from multiple sites. It was speculated that dystocia and fetal death contributed to ascending uterine infection.

Oleander intoxication was diagnosed in a Pygmy goat that died suddenly. Pulmonary edema, thoracic and pericardial effusion, and fibrino-hemorrhagic cholecystitis were observed during necropsy. Microscopically, the goat also had mild myocardial necrosis and necrotizing hepatitis. *Streptococcus lutetiensis* was isolated from the gallbladder. Trace amounts of oleandrin (the toxic principle of *Nerium oleander*) were detected in the ruminal content.

Pig

Splenic torsion caused hemoabdomen and death in a 3-year-old sow. After a 2-day history of severe dystocia while farrowing, the sow vomited and died. On postmortem examination, the abdomen was filled with a very large amount of clotted and mostly unclotted blood. The spleen was uniformly engorged with blood, enlarged, and twisted 180 degrees over its long axis at the gastrosplenic ligament. The spleen is relatively loosely attached in pigs, which can lead to gastrosplenic ligament torsion in this species.

Poultry and Other Avian

Respiratory mycoplasmosis due to **Mycoplasma gallisepticum** was diagnosed in a **feral backyard chicken** with nasal and ocular discharge that was found in a park. Lymphofollicular conjunctivitis, sinusitis, and tracheitis were detected on postmortem examination, and *M. gallisepticum* PCR was positive on a tracheal swab.

Extra-intestinal **rotavirus A** infection was diagnosed in two **pigeons** from a 15-bird loft that died with a brief history of anorexia. Severe hepatic degeneration and necrosis with high viral load was observed in both animals. Pigeon rotavirus hepatitis is one of the most common conditions diagnosed in domestic pigeons at CAHFS in the last few years. Other common viruses that affect pigeons include pigeon circovirus and pigeon paramyxovirus 1.

Highly pathogenic avian influenza (HPAI) H5N1 was diagnosed in a wild **adult mute swan (***Cygnus olor***)** that was found dead. On gross exam, the pancreas and liver were enlarged and mottled dark red. Microscopically, there was marked pancreatic necrosis, mild degenerative changes in the liver, and encephalitis. H5 Gs_GD influenza subtype was confirmed by PCR. This case is one of several recent HPAI detections in avian species in California.