



Welcome Dr. Eileen Henderson

CAHFS is pleased to welcome Dr. Eileen Henderson to our team. Dr. Henderson joined the CAHFS-San Bernardino laboratory as a diagnostic pathologist on August 17, 2020.

Dr. Henderson received her BA (2010) in Biology from Bryn Mawr College, PA and her MS (2013) in Marine Science from Hawai'i Pacific University, HI. She then obtained her DVM (2017) from Michigan State University where she also completed her Residency (2020) in Anatomic Pathology. Dr. Henderson obtained her Aquatic Veterinarian certification (2020) through the World Aquatic Veterinary Medical Association (WAVMA) and has successfully passed Phase I of the American College of Veterinary Pathologist (ACVP) exam. Dr. Henderson brings specialized training and expertise in aquatic medicine and pathology.



Dr. Eileen Henderson

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Holiday Schedule

In observance of Labor Day, CAHFS will be closed on Monday, September 7, 2020

Equine

***Rhodococcus hoagii* osteomyelitis, arthritis, pneumonia and lymphadenitis** was diagnosed in a 14-week-old filly that had been treated for respiratory disease of 6-week duration. Although the respiratory signs had been subsiding, the foal developed right stifle joint effusion. Radiographs revealed a lytic lesion within the medial epicondyle of the right femur. On gross exam the right stifle joint contained exudate and the medial epicondyle of the right femur had a 2 cm diameter yellowish-white area surrounded by a thin rim of hemorrhage that microscopically included numerous bacterial laden macrophages. Several granulomas were also present within the lungs, tracheobronchial and mesenteric lymph nodes. *Rhodococcus hoagii* (formerly known as *Rhodococcus equi*) was isolated from the stifle joint exudate and from the lung.

***Streptococcus dysgalactiae* cellulitis** was diagnosed in three, 5- to 7-day-old Jersey calves from a dairy where 25% of the calves were developing swollen limbs and/or joints in the first week of life. Some deaths had occurred. All three calves had marked red subcutaneous edema of the 4 legs and milder ventral midline edema. Occasionally, some leg joints had fibrin. *Streptococcus dysgalactiae* was isolated from the subcutis, joints and liver of all three calves, indicating septicemia. One calf had concurrent infection with *Actinobacillus equuli* ssp. *haemolyticus*.

Bovine

Bovine viral diarrhea virus (BVDV) infection was associated with mild encephalitis and chronic pneumonia in an 18-month-old crossbred beef heifer with a 2-month history as a poor doer with staggering gait, short stepping, droopy ears and pneumonia. Many neurons in the brain were positive for BVDV by IHC; both the brain and lung were positive by PCR for this virus. Concurrent moderate selenium deficiency, atrophy of fat and decreased muscle mass were detected. Two other herd mates were sick and two others had died.





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Small Ruminant

A chronic **atlanto-occipital joint abscess** was the cause of neurologic disease and death of a 2- to 3-month-old lamb. Four other lambs from the same flock, which were raised on pasture with the ewes, developed sudden onset of hind limb paralysis which progressed to tetraparesis and death in a couple of days. At necropsy, a large amount of green creamy material was found in the atlanto-occipital joint. On histology the abscess had a thick fibrous capsule. *Trueperella pyogenes* was isolated from the abscess.

Contagious ecthyma (orf) was diagnosed in a 1.5-year-old ram with large proliferative lesions in the skin of the hind limbs above the coronary band. One other ram was affected and had severe proliferative lesions affecting the skin over the distal third of the tibia. Symptomatic treatment, including antibiotic and antifungal medications, for over a month had no effect. Biopsy examination revealed severe chronic lesions compatible with parapox virus and secondary bacterial infection. PCR for pan-parapoxvirus and for contagious ecthyma were both positive.

Pig

Chronic endometritis was the cause of several days of anorexia and lethargy in an afebrile previously pregnant sow. Abdominal ultrasound revealed fluid in and around a tubular organ presumed to be intestine. At necropsy, the fluid filled tubes were identified as the uterus which contained abundant sour, slightly turgid yellow fluid and filled 80% of the abdominal cavity. The cervix was closed due to retained corpora lutea from the resorbed pregnancy. *Actinomyces hyovaginalis* was isolated in pure culture from the uterus. This organism is part of the normal flora in the genital tract of pigs but has also been associated with vaginitis, mastitis, pneumonia and rarely abortions in pigs.

Wildlife

Avitrol (4-aminopyridine) was detected in bait and upper gastrointestinal (GI) content from three Canada geese and three corn samples submitted from a die-off of 26 Canada geese near an apartment complex in Georgia. A company had been contracted to control and/or remove the geese. Necropsy revealed the presence of corn in the upper GI tract of all three geese. Testing of GI contents from the three geese and of the three corn samples revealed large concentrations of avitrol. This substance is an avicide found in products approved and regulated by the USEPA to control various populations of birds considered to be pest species, such as blackbirds, cowbirds, pigeons and starlings. These products are used around feedlots, landfills, airports and other facilities. Corn is used as a vehicle for the chemical, which makes it attractive to non-target species such as Canada geese, which is protected by the Migratory Bird Treaty Act. Avitrol is highly toxic to mammals, birds and fish, and because of that it can only be purchased and used by a certified applicator. Clinical signs, if observed, are related to nervous system stimulation, and include hyperexcitability, tremors, ataxia and seizures.

Poultry and Other Avian

Septicemic listeriosis caused sudden death in a 6-month-old hen. At necropsy, the heart was markedly enlarged, tan-white, and showed a bulging appearance on cut surfaces affecting ~80% of the heart. Histology revealed severe myocarditis and hepatitis. *Listeria monocytogenes* was isolated from the liver and the heart. Mild brain and peripheral nerve lesions were compatible with concurrent Marek's disease.

