## CAH Update UCDAVIS VETERINARY MEDICINE

## **A New Hope for FIP**

Fifty years is a long time to devote to studying one disease, but the complex nature of feline infectious peritonitis (FIP) holds the attention of Dr. Niels C. Pedersen like no other mystery in veterinary medicine. FIP affects approximately one in 300 cats (mostly young ones) and is nearly always fatal. There is hope on the horizon, however.

A collaborative group of researchers from the UC Davis School of Veterinary Medicine, Kansas State University and Wichita State University recently reported they successfully blocked progression of FIP in a clinical trial for the first time.

"This is the first attempt in veterinary medicine



to attack a fatal systemic viral disease using modern anti-viral drug technology, such as that used in HIV-AIDS therapy and in treating Hepatitis C in humans," said Pedersen, founding director of the Center for Companion Animal Health (CCAH), who leads the efforts at UC Davis to find a treatment. "Hopefully this is the first step toward the end."

The researchers have focused on developing compounds with broad anti-viral activity and recently demonstrated that one of their research compounds stopped progression of the disease and led to clinical recovery when given to cats with FIP.

"We've had a series of breakthroughs over the past half century, but each time you think you have an answer, it leads to more questions," said Pedersen, a distinguished professor emeritus of medicine and epidemiology. "It's the complexity of FIP that never ceases to amaze me—it's kept my interest for this long!"

The Morris Animal Foundation recently committed \$1.2 million to fund research that will advance knowledge of FIP. After a rigorous selection process, Dr. Yunjeong Kim and her team at Kansas State received an additional grant to conduct a clinical trial investigating the effect of the newly identified compound in client-owned cats with FIP. The clinical trial currently is underway as a collaborative effort between Kansas State and UC Davis. The researchers hope to enroll up to 70 cats with FIP into the trial, and anticipate the study will be completed in two years.

The first phase of the trial involving 15 cats with various forms of FIP is fully enrolled, and no more cats are being accepted for treatment at this time. It will take researchers two to three months to evaluate preliminary results and decide on what forms of FIP will respond best to treatment and the optimal dosage regimen. Once those determinations are made, the trial will be re-opened for another small group of cats that meet trial guidelines.

"This exciting development demonstrated that inhibiting growth of the virus is a critical part of treatment," Pedersen said. "Now we must determine the optimal dosage regimen to bring about a long-term or even permanent remission of disease."