



How FIP Affects the Feline Immune Response

Vermeulen BL, Devriendt B, Olyslaegers DA, et al. Suppression of NK cells and regulatory T lymphocytes in cats naturally infected with feline infectious peritonitis virus. *Vet Microbiol.* 2013; 164: 46-59.

Parts of the immune response are especially important to protect against feline coronavirus and prevent development of feline infectious peritonitis (FIP). In particular, lymphocytes play a key role in protection.

These investigators examined the levels of different lymphocyte groups in cats with and without naturally occurring FIP. They found that a particular type of lymphocyte, termed the regulatory T lymphocyte, is depleted in cats with FIP. This is believed to contribute to the immune-mediated disease associated with FIP, as well as the inability of the infected cat to clear the virus. In addition, another type of lymphocyte, the natural killer cell, was also found to be depleted in cats with FIP. These cells are an important defense against virus infections. The natural killer lymphocytes that remained were found to be less effective in eradicating virus-infected cells than they should be.

These findings indicate that cats with FIP suffer dramatic suppression of their ability to combat the virus as well as decreased ability to prevent immune-mediated disease. This may open the door for new therapies designed to enhance the numbers and functions of these cells. [MK] *Source: Winn Feline Foundation*

Gene Therapy to Combat Alzheimer's

St. Jude Children's Research Hospital scientists have identified an enzyme that can halt or possibly even reverse the build-up of toxic protein fragments known as plaques in the brains of mice with Alzheimer's disease. The research appeared in a recent edition of the scientific journal Nature Communications.

Plaques decreased substantially in mice treated with gene therapy to increase activity of the enzyme neuraminidase 1 (NEU1) in a region of the brain involved in learning and memory. Plaques accumulate between neurons in the brains of Alzheimer's patients and are a hallmark of the disease. The research results raise hopes the enzyme could lead to new methods of diagnosing and treating Alzheimer's disease, a neurodegenerative disorder that causes problems with memory, thinking and behavior. More than 5 million Americans are currently living with the problem. The number is expected to rise as the population ages.

The findings suggest that down-regulation of NEU1 and a reduced supply of the enzyme may contribute to the development of Alzheimer's disease or similar neurodegenerative disorders in some patients. Now the question is whether a therapeutic window exists when the enzyme could be used to halt or even reverse the disease.

Source and full article: St. Jude Children's Research Hospital <http://tinyurl.com/qyetjj8>

Nonsurgical Neutering Drug on the Horizon

Zeuterin, an injection of zinc gluconate and arginine, could soon offer U.S. veterinarians a new way to sterilize dogs. This nonsurgical sterilization treatment are emerging could be commercially available in the U.S. by the end of this year and could reduce or even eliminate the need for traditional neutering. Zeuterin is injected directly into a dog's testicles, killing the sperm and then shutting down the passageway through which it would normally travel. The results are permanent, and the process takes only a few hours, poses little risk compared with surgery and works in 99.6 percent of dogs, according to research trials.

The drug now called Zeuterin has been on the market before and failed. Introduced as Neutersol in 2003, the drug, which needs to be injected very precisely and delicately, was sold to veterinarians without much training or support. As a result, too many dogs had adverse reactions (inflamed testicles, mostly), and the drug earned a bad reputation. By 2005, both it and the company behind it had disappeared. Mr. Tosini, CEO of Ark Sciences which owns the rights to Zeuterin, said Ark Sciences had learned from the mistakes of its predecessor. To provide Zeuterin, veterinarians will have to complete a five-hour course that includes injecting the drug into several dogs.

According to Ark Sciences website, Zeuterin was approved August 31, 2012 by the FDA for non-surgical neutering of male dogs 3-10 months old. The FDA Approval Study, several follow-up studies, and field trials all have established that Zinc Neutering can safely sterilize a dog and reduce its testosterone levels by about half. A compilation of reports was presented at the 2009 North American Veterinary Conference by James Weedon, DVM, MPH, DACVPM. (NEUTERSOL: A CLINICAL PERSPECTIVE, James R. Weedon, DVM, MPH, DACVPM, Spay-Neuter Assistance Program, Inc., Houston, TX) <http://tinyurl.com/klv2f8j>
Sources: New York Times/New Strides in Spaying and Neutering; Ark Sciences website www.arksciences.com

Compassion Over Killing Mole Charged with Animal Cruelty

Taylor Radig, a member of the animal rights activist group Compassion Over Killing, who secretly captured on video alleged abuses of dairy calves at a Colorado ranch, has been charged with animal cruelty for failing to report the abuse while it was happening, Weld County Sheriff John B. Cook said in a news release.

Radig filmed the video from mid-July through September while acting as a temporary employee. "Radig's failure to report the alleged abuse of the animals in a timely manner adheres to the definition of acting with negligence and substantiates the charge of animal cruelty," Cook said. Radig is the fourth suspect to be charged following Compassion of Killing's Nov. 12 delivery of the video. *Source: Meating Place*

Lawsuit Seeks 'Legal Personhood' for Chimpanzees

A U.S. animal rights group filed what it said is the first lawsuit seeking to establish the "legal personhood" of chimpanzees. The non-profit Nonhuman Rights Project (NRP) asked a New York state court to declare a 26-year-old chimp named Tommy "a cognitively complex autonomous legal person with the fundamental legal right not to be imprisoned."

The lawsuit seeks a declaration that Tommy's "detention" in a "small, dank, cement cage in a cavernous dark shed" in central New York is unlawful and demands his immediate release to a primate sanctuary. The group is filing additional suits on behalf of four chimps across New York. The other chimps are Kiko, a 26-year-old chimp living on a private property in Niagara Falls, and Hercules and Leo, two young male chimps used in research at Stony Brook University on Long Island, the group said.

The lawsuit states that chimps are entitled to a "fundamental right to bodily liberty," meaning a basic right to be left alone and not held for entertainment or research.

Attempts to grant rights to animals have been made in countries such as Spain, which in 2008 passed a resolution giving apes some rights although it never became law. A "legal person" case was also pursued in Brazil, but it was never resolved because the chimp died before the judge could rule.

The New York lawsuit was filed at "the earliest point at which we have some reasonable chance at winning," said NRP president Steven Wise, an animal rights activist and author who teaches animal law. "These are the first cases in an open-ended, strategic litigation campaign," Wise stated. "We're just going to keep filing suits."

The legal cause of action being used by NRP is the common law writ of habeas corpus, through which somebody who is being held captive, for example in prison, seeks relief by having a judge call upon his captors to show cause as to why they have the right to hold him. More specifically, the suits are based on a 1772 case involving an American slave named James Somerset. After Somerset's owner took him from Virginia to England, a group of abolitionist lawyers filed a petition to have him freed.

NRP in 2007 began a nationwide search for an optimal venue to file the lawsuits. A team of attorneys, legal experts and volunteer law students worked their way through state laws to see how key arguments for personhood cases might fare. States were given an overall rating – i.e. number of stars – reflecting the likelihood of being a state to file suit, based on the legal considerations, the needs of nonhuman animals in captivity, and ability of NRP to return them to the wild or in a suitable sanctuary.

Overall Rating 5 stars. New York was ultimately chosen for filing of the suits because the state recognizes the continuing viability of the common law writ of habeas corpus.

Other highly rated states considered for future suits include:

- Overall Rating 5 stars. Connecticut scores high in all the key legal issues. The state has favorable *habeas corpus* law, has established some important legal precedents, and has allowed *habeas corpus* petitions regardless of whether the petitioner has the wherewithal to be released immediately.
- Overall Rating 5 stars. Pennsylvania is a very attractive state. Not only does it have favorable precedents in common law *habeas corpus*, it also has a strong history of using the common law writ of *de homine replegiando*. NRP also found several examples of chimpanzees being made available for sale online.
- Overall Rating 4 stars. New Jersey is among the most appealing states for the NRP. On the legal side, the state has a strong history of courts using the common law writ of *habeas corpus*, with just one caveat (*see the next post on The Legal Case*). New Jersey adopted the common law of England in 1776, which means that the state implicitly adopts the ruling in the *Somerset* case – a critical case for the NRP to rely on.
- Overall Rating 4 stars. California is clearly a state in which the NRP has a great interest for future lawsuits based on its large population, tendency to set trends for the rest of the nation, and the large number of nonhuman animals in captivity. The state has set progressive trends for companion animals with passage of the Hayden Act and with SB1520 which outlaws traditional method of producing foie gras. Even though there are some technical legal issues with how the writ of *habeas corpus* can be applied in California, it remains a key state for the NRP.
- Overall Rating 3 stars. North Carolina presents a particular legal problem in that the state does not allow a *habeas corpus* petitioner the right to appeal to a higher court. North Carolina is still firmly on the radar for the future considering captive chimpanzees are available as the focus for a suit.

The Nonhuman Rights Project goal is to breach the legal wall that separates all humans from all nonhuman animals. Once this wall is breached, the first nonhuman animals on earth will gain legal "personhood" and finally get their day in court. *Sources: Reuters; Nonhuman Rights Project website; Toronto Star*

San Diego Pet Shop Sues over Ban

November 27, 2013. A formal complaint has been filed in federal court on Nov. 25 by the owners of San Diego Puppy, Inc., a retail pet shop located in the city of San Diego. The suit attacks the citywide ban on the sale of dogs, cats, and rabbits at pet stores, which was passed on July 10, 2013.

The lawsuit was filed by David and Veronica Salinas, the owners of the pet store, against the City of San Diego, the San Diego Humane Society, the San Diego Animal Defense Team, the Animal Protection and Rescue League, and the league's lawyer, Bryan Pease, for their "unified effort" in passing the Companion Animal Protection Ordinance, which prevents c the Salinas' complaint contends that there are already laws in place to protect against neglect and mistreatment by breeders. Adding to that, Salinas states in the document that all dogs sold at San Diego Puppy, Inc., come with a certificate of health.

According to the San Diego Puppy complaint, the business was irreparably harmed by the ordinance. It is the only retail "pet store in the city that is/was selling purebred and other high-quality puppies that are not purported to be from a rescue or shelter retail facility." *Source: Opposing Views <http://tinyurl.com/lmwyam8>*

Animals Seized from Gates County Farm

November 27, 2013. Approximately 40 dogs and more than 75 cats, miniature horses, rabbits, turkeys, and chickens were seized from a small farm after a complaint about an emaciated horse prompted concern with local law enforcement. HSUS, SPCA of Wake County and SPCA of Northeastern North Carolina assisted in transporting animals after the Gates County Sheriff's office served a search and seizure warrant on the property. Sheriff Webb said the property owner surrendered the animals, and he did not think they meant for the conditions to get so out of hand. He said the owners of the small farm were well known and respected in the local community. "Not that these folks didn't love their animals," Webb said. "It got to be too much."

HSUS alleges the owners were running a "puppy mill". The Sheriff's Office is conducting an investigation, but so far, no charges have been filed against the owners of the animals. The case will be sent to the District Attorney's Office and they will decide on possible charges. Just days after the animals were seized some of the dogs were already in the process of being adopted. SPCA of Northeastern NC had 5 pending adoptions.

Source: WAVY.com

HSUS Gears Up Lobbying for HB 930

In a recent Op-Ed, HSUS CEO Wayne Pacelle claimed yet again that North Carolina's weak laws have allowed the state to become a haven for unscrupulous puppy mill operators. Pacelle noted that the House passed HB 930, a bill regulating commercial breeding facilities, but that it stalled in the Senate. "We'll be at it again in 2014 to complete the job", he continued.

Governor McCrory and his wife Ann promoted the bill this year, pushing the legislature to take action. McCrory told the Charlotte Observer he was not going to give up on the bill. As part of the push for "puppy mill" legislation, the Governor and first lady hosted an adoption event at the Governor's mansion for rescued dogs from Charlotte, Guilford and Pender County shelters. The adoption event also provided the opportunity for HSUS representatives to present Humane State Legislator Awards to Representatives Rayne Brown (R-Davidson) and Jason Saine (R-Lincoln), both sponsors of HB 930.

Saine worked with the First Lady along with Representatives Rayne Brown, Nathan Ramsey, Chuck McGrady, Pat McElraft and Pricey Harrison on writing the legislation.

Benefit for Animal Legal Defense Fund

December 4, 2013. Metro Wine in Asheville hosted a benefit wine tasting for the Animal Legal Defense Fund. In addition to wine tasting, glass of wine, and party food, participants had the opportunity to meet Stephen Wells, executive director of ALDF.

ALDF's stated goal is to bring a case that will take these animals out of the realm of 'property' and grant them legal status of their own. ALDF is a partner in The Great Ape Legal Project, a joint project between ALDF and the Great Ape Project International, working to establish legal rights for nonhuman great apes.

Most recently, ALDF along with several other groups filed a legal petition with the U.S. Department of Agriculture's Food Safety and Inspection Service calling on the agency to issue new regulations declaring foie gras a diseased product that is unfit for human food under the federal Poultry Products Inspection Act.

ALDF also filed a citizen's petition to FDA requesting new labeling of shell eggs sold in the U.S. ALDF claimed that current labeling fails to reveal to consumers certain material facts that substantially influence their purchasing decisions. They further requested that FDA require shell eggs to bear one of three labels: Free Range Eggs, Cage Free Eggs, Eggs From Caged Hens and provided descriptions of production conditions that would be associated with each term. FDA denied the petition.

Lincoln County Approves No-Kill Animal Shelter

Commissioners this week approved the No Kill Equation, an approach designed to reduce the number of animals killed in shelters. Officials plans to work to trap, neuter and release feral cats. Low-cost spay and neuter clinics will be set up. Officials also plan to focus on making it easier for people to reclaim pets brought to the shelter. The goal of the program is to ensure that fewer than 10 percent of animals brought to the shelter are euthanized

Dogs Rescued from Rescue

Hudson, Florida -- Dogs barking and people yelling drew Pasco County Sheriff's deputies to the property on Montour Drive on Sunday. Once there, they discovered more than 50 dogs - many of them housed in crates. Although there was no neglect, authorities determined there were more dogs than the owners could handle and took possession. The property owners and their daughter run a charity called Sleepy Hollow Dog Rescue. For a time, all the dogs were in North Carolina at a relative's house. But according to the Davie County Sheriff's Office, the owner of the North Carolina house did not want the dogs and so recently, they were all trucked back to Florida. Custody was voluntarily given to animal services, but the county shelter is full too, so other rescue groups are now getting involved. *Source: 10News Tamp Bay*

North Carolina Responsible Animal Owners Alliance, Inc. (NCRAOA) is a statewide organization of animal owners and professionals dedicated to animal welfare, responsible animal ownership, and maintaining the rights of responsible citizens to breed and own animals. NCRAOA, a 501(c)3 organization, provides education and information to the public and supports reasonable and humane animal welfare laws. Permission granted to copy and distribute NCRAOA News and Views in its entirety as is.

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