



## April, 2010

### **UNC Awarded \$14.5M for Animal Research Expansion**

April 7, 2010. The University of North Carolina at Chapel Hill has been awarded about \$14.5 million in American Recovery and Reinvestment Act (ARRA) funding from the National Institutes of Health to build 30,000 square feet of new buildings at its Bingham Facility.

The Bingham Facility is an animal research facility in Orange County. UNC is a leading center for research in hemophilia and muscular dystrophy, and research supported by the Bingham Facility focuses on these genetic diseases. The grant provides funding to build two buildings, to be completed by 2013, to house animals and support the infrastructure of the facility.

Because the funding is an economic stimulus grant, the project will create jobs and encourage the purchase of materials made in America. Since March 2009, not including this award, UNC researchers have received nearly \$110 million in ARRA grants or awards. About \$129 million in total ARRA funding is expected.

“To receive a construction award in such an extremely competitive grant program is an achievement that reflects the extraordinary quality of work by our faculty researchers,” said Tony Waldrop, vice chancellor for research and economic development at UNC-Chapel Hill. “The researchers whose work will be supported by the Bingham Facility are national leaders in discovering new gene therapy for hemophilia, muscular dystrophy and cardiovascular disease. They give new hope daily to patients with these diseases.”

In addition, the University will fund and construct a building to house veterinary services, laboratories and offices. This work will take place alongside the construction sponsored by the federal government.

The Bingham Facility has been in operation since the 1970s. This funding ensures that the facility can continue to grow to meet research needs now and in the future, University officials said. The additional construction is consistent with a master plan prepared in 2004. At full build-out, the plan calls for the facility to span 103,000 square feet in several buildings clustered together on the 57-acre site.

Planning for the new construction will be completed in the summer or fall of 2011 and construction will be completed in mid-2013.

<http://uncnews.unc.edu/content/view/3506/1/>

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## **Strickland signs Livestock Care Standards Board legislation**

COLUMBUS — Ohio Governor Ted Strickland signed the legislation making the Ohio Livestock Care Standards Board a reality March 31. State Representative Allan Sayre sponsored the bill, which creates the Ohio Livestock Care Standards Board and establishes the terms of office for the 13 members of the board. The bill, which was a constitutional amendment passed by voters in November 2009, requires the board to adopt rules governing the care and well-being of livestock in Ohio, including best management practices, and establishes the amount of civil penalties to be assessed against people who violate the rules. *Source: Farm and Dairy*

## **KY Livestock Care Standards Commission Poised to Become Law**

FRANKFORT, KY – As the 2010 General Assembly winds down, animal agriculturalists have anxiously waited to see the fate of an important piece of legislation that would affect them. Senate Bill 105 called for the creation a 14-member Kentucky Livestock Care Standards Commission (KLCSC) that would set rules for the treatment of animals and poultry on the farm in an effort to head off by groups such as the Humane Society of the United States (HSUS) and People for the Ethical Treatment of Animals (PETA) to impose their legislative agendas on the industry in Kentucky.

The much anticipated bill was passed unanimously by the full Senate earlier in the month and finally got through the House last Wednesday but not without a few changes made in the House Agriculture and Small Business Committee.

"I'm pleased that the House finally got the bill voted on and moved and was very appreciative of the substantial support that we had there," said David Givens (R-Greensburg) sponsor of the legislation. "This is so important to our livestock producers and all of agriculture because our livestock producers are such a key component and a key customer to our grain producers. We are really all involved in this together."

Jeff Harper, director of the Kentucky Farm Bureau (KFB) Public Affairs Division said that even though the bill came through with a House Committee Substitute (HCS), the original intent remained intact; the biggest change being that the new commission would serve as an advisory board to an already existing agriculture board. "In Kentucky we have in place a state board of agriculture that is already authorized to promulgate regulations, so rather than the KLCSC promulgating the regulations, it will make recommendations for on-farm livestock and poultry care standards to the state board of agriculture," he said.

Those recommendations would then be either approved by the board and enacted within 30 days or rejected with the reasons for rejection then provided in writing to the commission, according to Harper.

*By Tim Thornberry ~ Business Lexington News*

*Full Story at link: <http://tinyurl.com/yksfw25>*

## **May 8 is National Animal Disaster Preparedness Day**

The Federal Emergency Management Agency's Citizen Corps has declared May 8, 2010, National Animal Disaster Preparedness Day. The declaration is meant to raise awareness about the importance of planning for pets' safety before disaster strikes.

Citizen Corps is asking veterinarians and kennels to provide pet owners with tips on creating emergency plans for their companion animals. Additionally, the corps recommends partnering with a local pet store to hold an event offering pet disaster kit shopping lists and giveaways, such as identification tags.

"Preparedness is peace of mind, and including our animals in preparedness plans before an emergency or disaster is the best way to ensure the safety of people and their pets," said Dr. Heather Case, AVMA Scientific Activities Division director.

"Citizen Corps National Animal Disaster Preparedness Day is the perfect time for veterinarians to encourage their clients to develop appropriate animal evacuation plans and kits," Dr. Case said.

The AVMA offers an array of disaster preparedness resources, including "Saving the Whole Family," a client brochure on ways of providing for pets during an emergency. The brochure and other disaster planning resources are available in the Animal Health section of the AVMA's Web site at [www.avma.org](http://www.avma.org).

## **BREAKING NEWS: Charity Navigator Downgrades HSUS Ratings**

This is huge news. Massive. Earth-shaking.

Charity Navigator, probably the best-known (read: best-marketed) nonprofit watchdog, grades organizations on how well they spend their money. Today Charity Navigator downgraded HSUS's rating from "four stars" to just three.

Google's cache of the Charity Navigator web page shows that as of this morning, HSUS still had a 4-star rating. Did someone over at Charity Navigator see the full-page HumaneWatch ad in USA Today this morning? Could be.

Previously, HSUS had a score of 62.61. It's now just 51.57, a decline of 17 percent. And there's more.

The updated ratings show that HSUS's "fundraising efficiency"—I should say inefficiency—got significantly worse in 2008. While Charity Navigator shows that HSUS spent 13 cents to raise every dollar in 2007, that number more than doubled to 27 cents. In other words, HSUS's fundraising inefficiency doubled in 2008.

Additionally, Charity Navigator writes that the percentage of money HSUS spends on fundraising (as an overall percentage of its budget) nearly doubled between 2007 and 2008, from 12.7 percent to 24.2 percent. In contrast, the percentage that HSUS spends on its programs—you know, supposedly saving animals—also decreased by 11 percentage points.

Charity Navigator also downgraded the rating of Humane Society International (HSUS's global arm) from 3 stars (see the Google cache) to just 1 star this morning.

This should be encouraging news to Humane Watchers everywhere. It is possible to set the record straight. And this should send a clear message to HSUS that you can't just stuff donor dollars away in pension plans, share less than 1 percent of everyone's contributions with real-live pet shelters, and expect no one to notice.

[www.humanewatch.org](http://www.humanewatch.org)



**HUMANEWATCH.ORG**

Keeping a watchful eye on the Humane Society of the United States



## HSUS Enters Dog Food Market

Their press release claims HSUS is offering consumers a wholesome and nutritious dog food that does not contain animal-based proteins or support the factory farming industry; however, it is the height of arrogance for the animal rights movement to force its ideology on pets at the risk of doing them harm. Hypocritical as well since the core belief of the movement is equality of the species and animal ownership is called a form of slavery. If, according to the basic tenet, humans have no right to own animals what justifies forcing them to deny their evolutionary diet?

Vegetarian recipes consist mostly of vegetables, grains and soy products. By nature, carnivores eat virtually no grains or soy products. These foods are very high in carbohydrates which are almost unheard of in the wild carnivore's diet. Metabolically, carnivores are not designed to use carbohydrates in such a large quantity. The result is a weakening of the health of the animal.

Ingredients in the new HSUS dog food are particularly troubling. The main ingredient is ground canola seed which can be used to feed livestock, but is not considered appropriate for species that require higher levels of Lysine, one of the nine major amino acids an adult dog must obtain from food. Studies have shown decreased digestibility for canines for soy protein vs animal protein. Soy is also among the top three allergens for dogs.

The Whole Dog Journal published a review of the food stating, "We don't think vegetarian diets are a good idea for dogs (and especially not this one)." According to the WDJ article, study published in the Journal of the American Veterinary Medical Association in 2003 linked dilated cardiomyopathy (DCM) caused by taurine deficiency in 12 dogs to lamb and rice dog foods that were low in taurine, despite meeting AAFCO requirements (many manufacturers of lamb and rice dog foods now voluntarily add taurine to their foods as a result). Another study done in 2003 found that dogs fed diets containing rice, rice bran, or barley had lower levels of taurine in their blood. Dr. Quiton Rogers of the University of California at Davis, School of Veterinary Medicine says, "During the past few years, our clinic has seen an increasing number of dogs with low plasma concentrations and clinical signs of cardiomyopathy. The common factor in all cases was their diet history." According to Dr. Robert Prosek, "pets may develop DCM on taurine deficient diets, such as vegetarian diets."

In a 2004 forum for Best Friends, Dr. Phil Brown, Nutrition Specialist, wrote, "Carnivores kill not for the sake of killing but to survive. Instinctively, their desires arose from the physiological need for specific nutrients obtained from meat. Healthy eating has prompted many people to switch their dogs to vegetarian foods, all the while ignoring their animals' ancestry and anatomy. The nature of the species is being disrupted, and the evolutionary process is being usurped by personal beliefs. The natural order of the food chain is at risk in man's attempt to fix something that is not broken."

As author Wesley J. Smith wrote in First Things: "Dogs are natural carnivores and, were they capable of choice, would never choose a meat free diet. Unlike cats who will go blind, dogs can survive on specially blended vegetarian fare but it isn't natural to them. And it strikes me: HSUS providing a product to help make dogs vegans has nothing to do with the welfare of canines, which thrive on dog food containing meat. Rather, the product reveals Pacelle and company's true inner Newkirk [PETA president Ingrid]. Ironically, since animal rights ideology holds that there should be no domesticated animals, if HSUS, PETA, and their fellow travelers ultimately prevailed in remaking society, there would be no dogs left to be made into vegans."

# AVMA briefs Congress on importance of antibiotics

**For Immediate Release March 29, 2010**

Washington — The nation's largest veterinary association briefed Congress today on the uses of antibiotics and how they help protect animal health, providing in-depth scientific information on the necessity of antibiotic use for preventing and treating disease in companion animals and livestock.

Two educational sessions were held by the American Veterinary Medical Association (AVMA) with honorary hosts Rep. Kurt Schrader, DVM, (D-Ore.) and Sen. John Ensign, DVM, (R-Nev.), the only veterinarians serving in Congress. The discussions allowed congressional staffers to learn about when and how veterinarians utilize antibiotics to keep both food supply animals and household pets disease-free.

Speaking at the briefings as an expert in livestock medicine, Dr. Lloyd Keck, a worldwide animal health consultant to the poultry industry and former AVMA Congressional Science Fellow, dispelled arguments related to human antibiotic-resistance risks.

"Antibiotics are necessary for veterinarians to protect the health and well-being of animals," Dr. Keck said. "Benefits to animals and people outweigh the current risk associated with bacterial resistance. Going forward, we need to let good sense and good science guide this issue."

Dr. René Carlson, former Wisconsin Veterinarian of the Year and past-vice president of the AVMA, explained the indispensable role that antibiotics play in treating various ailments that affect household pets and the process that veterinarians use to determine whether or not to use antibiotics.

"Whenever I consider using an antibiotic in any of my patients, I always look at four outcomes," Dr. Carlson said. "First, will it successfully treat a diagnosed medical condition? The second outcome is prevention of an infection in a high-risk patient because of a particular injury or procedure. Third, I look at a decreased likelihood for development of a resistant infection or organism. And finally, I am concerned with the protection of the health of the animal and its owners who come in contact with it."

"The principles of antimicrobial use are the same whether for companion animals or food animals," Dr. Carlson added. "The difficulty comes when owners of the animals don't consult with a veterinarian or comply with the veterinarian's instructions."

The briefings were part of the AVMA's continued efforts to educate Congress about the complex and crucial nature of treating America's animals – and how the health of those animals impacts human health, whether through the food supply or through direct contact with pets.

The AVMA is strongly opposed to H.R. 1549 and S. 619, the Preservation of Antibiotics for Medical Treatment Act (PAMTA). The AVMA's scientific experts have twice testified before Congress that broad-based antibiotic bans, such as PAMTA, would have adverse effects on animal and public health.

The AVMA continues to emphasize the importance of judicious use of antibiotics.

"Antibiotics are a vital part of the veterinarian's toolkit," said Dr. Ashley Shelton, assistant director of the AVMA's Governmental Relations Division. "There are very few drugs available for treating animal disease, and the AVMA believes that antibiotics should be used judiciously and in the best interest of animal health and public health."

Speaking last week, Rep. Schrader reaffirmed the role of veterinary medicine in protecting public health and the safety of America's food supply.

"America has the safest food in the world. Advanced animal husbandry, 21st century technology, sanitation, appropriate veterinary and medicinal therapy allow us to compete on a global scale while assuring the health of our livestock and poultry," Rep. Schrader said. ■

# The Senior Dog

When does a pet become "old"? Although the oldest dog on record was 29, the average life span of all dog breeds is around 13.5 years. Small dogs are considered geriatric at 11.5 years, but giant dogs breeds have reached the "twilight" period at 7.5 years. Aging is complex and dependant on external factors such as nutrition, disease, environment ~ not a constant 1:7 ratio over the dog's lifespan.

The chart opposite converts dog years to human years taking into consideration the size/weight of the dog. On this chart, shelties would be classified senior at age 7 and geriatric at age 12.

Aging is the net effect of negative changes in physiology, occurring over time, to body systems function and ability to maintain internal stability. Having your dog live to a ripe old age is more a function of avoiding accidents and disease, thus achieving the genetic life span potential of the individual dog. Older dogs are less able to handle threats to their body systems than are dogs in their prime. Old dogs, especially males, are particularly susceptible to the harmful effects of free radicals and lipid peroxidation.

## SIGNS OF AGING

Neural cells cannot divide or replicate, therefore the neural cells a puppy is born with are the same ones that it later dies with minus the ones lost along the way through trauma and normal aging processes. The nervous system performs three general functions: motor activity (muscle activation, glandular secretion), sensory functions (conscious and unconscious) and association functions (neural activity within the brain).

**Problems with Sensory Perception.** The loss of sensory function, as the brain ages, correlates directly with the loss of neural cells. As age reduces the brain's effectiveness, reduced sensory perception is inevitable. Sight, smell, hearing and taste fades. Not only does the interpretive ability of the nervous system decrease, but the sensory organs, themselves, become less capable.

With aging comes a loss of elasticity in the lens of the eye causing an inability to focus on nearby objects. The pupil is unable to expand and contract to the same degree as in youth, with the result that old dogs do not see as well in the dark and have a similar problem with very bright light. Ultraviolet light is damaging to lenses and, over time, may result in cloudiness.

During aging, calcium deposits may form on the small bones of the inner ear resulting in conduction deafness. Since the inner ear provides the brain with sensory signals responsible for our sense of balance, the calcium deposits can be disruptive of an aging dog's balance. With age, the eardrum loses its ability to respond quickly to vibrations resulting in the common hearing loss experienced in older dogs.

Because the dog's sense of smell is so acute, it is not understood just how strong their ability to taste is, or if taste relies on smell. With age the olfactory area of the brain atrophies and taste buds are lost, which reduces perception of palatability/attractiveness of foods to the senior dog.

Age	Up to 20 lbs	21-50 lbs	51-90 lbs	Over 90 lbs
5	36	37	40	42
6	40	42	45	49
7	44	47	50	56
8	48	51	55	64
9	52	56	61	71
10	56	60	66	78
11	60	65	72	86
12	64	69	77	93
13	68	74	82	101
14	72	78	88	108
15	76	83	93	115
16	80	87	99	123
17	84	92	104	
18	88	96	109	
19	92	101	115	
20	96	105	120	

*Italic numbers = Senior*  
Shaded numbers = Geriatric  
Chart developed by Fred L. Metzger, DVM,  
State College PA, courtesy of Pfizer Animal Health

The brain runs on glucose for fuel. A study of aging Beagles showed that the frontal area of the cerebral cortex utilization rate for glucose declines by 50% from three years of age to fourteen years of age. Therefore, older dogs face the prospect of senile dementia (senility) the same as humans. Cognitive dysfunction syndrome (CDS) is a progressive, age-related disease. CDS may be caused by the genetically pre-programmed death of neurons, or by metabolic and neuro toxins. Altered sleep cycles, panic attacks and trembling are clinical signs of impaired mental function or "senility."

## BONES, JOINTS, MUSCLES

With old age comes a wearing out of the joints and the muscles and bone. Muscle fibers cannot reproduce; therefore, the dog cannot replace those that are lost. This explains the characteristic loss of muscle mass and strength as the dog ages.

Hip dysplasia and osteoarthritis are the most common of all joint diseases, and often a way of life for the aging dog. Statistically, 20% of adult dogs and nearly 100% of old dogs are arthritic.

### *Arthritis & Supplements*

If any joint in the dog's body (and this is true in humans as well) has significant structural changes from normal, no amount of consumed nutrients in any form will correct that structural damage. If there are calcium deposits, scar tissue, cartilage tears and dissolution, contour changes to the bones at the joint surfaces from long term abnormal forces being applied... these abnormalities will remain present and will continue to affect the animal regardless of nutritional intake.

Supplements to the dog's diet such as Glucosamine and Chondroitin Sulfate, Omega Fatty Acids, Vitamin E, Selenium, and MSM all assist in decreasing inflammation and improving the body's ability to repair and strengthen tissues. Supplements will not reverse structural changes in a joint such as torn cartilage, calcium deposits and advanced scar tissue. The best you can expect from an arthritic joint when providing supplements such as Glucosamine and Chondroitin is a **decrease in pain** sensation, an **improved resistance** to additional joint tissue breakdown, and rejuvenation (improved health) of some soft tissues.

A problem with Glucosamine/Chondroitin supplements is knowing the quality of the brand you are buying. Companies can buy bulk chondroitin that ranges from 5-95% purity. If a company makes a capsule with 400 mg of 5% chondroitin, you're only getting 20 mg per capsule. An independent laboratory tested 25 various brands. To pass the test, a product had to meet or exceed its claimed weight for the appropriate form of glucosamine, chondroitin, or both within a five percent margin of error; nearly half the products failed the test. If results are not satisfactory with one type of Glucosamine supplement you are using, then try another that may turn out to be of higher quality.

Supplementing with Vitamin E is also generally recommended.

## DIET & NUTRITION

Keeping the dog lean is of course one secret to longevity. Consensus is to avoid obesity and feed only the amount of food needed to maintain weight. Snacks and treats should not make up more than 10% of daily diet. Commercially prepared Senior Diet Foods reduce protein level as well as fat percentage; ask your vet if the reduced protein is enough to sustain your elderly dog.



To supplement protein or increase bulk in a senior dog's diet use chicken or eggs; using cottage cheese can increase sodium levels more than desired. Below is a brief reference chart for protein, fat and sodium.

## KIDNEYS

Some studies put kidney failure as the second most common non-accidental death in dogs. As the kidney ages, its weight and volume decrease with resultant loss in capacity to concentrate or dilute urine as appropriate; there may also be higher levels of wastes in the blood. In older dogs with clotting disorders, such as von Willebrand's Disease, minor injuries can become major problems. For over forty years, dietary protein restriction has been the accepted form of nutritional management for dogs with reduced kidney function. Newer research has shown that reduced protein can cause decreased immune competence and increased susceptibility to stresses such as infection and injury.

In recent years, ten experimental studies using dogs have been published that failed to provide any evidence that reducing dietary protein had any beneficial influence on the course of renal failure. Today, even people on dialysis are encouraged to eat as much high-quality protein as they can to promote greater resistance to infection, keep muscle and help repair tissue. High-quality proteins from meat, fish, poultry, and eggs produce less waste (urea) in the blood for the kidneys to filter. With age, the geriatric canine is less able to maintain sufficient protein synthesis, and protein turnover also declines, so to preserve adequate protein reserves the older dog actually requires about 50 percent more protein than the young adult dog.

## TEETH

Studies show that by age three, 80 percent of dogs exhibit signs of gum disease. Symptoms include yellow and brown build-up of tartar along the gumline, red inflamed gums and persistent bad breath. If dental care is not continuous throughout the life of the dog, by the time a dog is geriatric the effects of dental neglect will be evident and potentially life-shortening. Decaying teeth can cause gum and mouth infections, and these infections can migrate to the vital organs and cause serious damage. Gum (periodontal) disease is extremely common in older dogs, and one of the more serious health problems that occurs. Basically it is the overwhelming presence of bacteria in the plaque that adheres to a dog's teeth. After cleaning or brushing, a chlorhexidine rinse (CHX, Nolvadent, Hexarinx) should be used to kill remaining bacteria and inhibit plaque growth.

## NURTURING

Dogs that receive improved medical care, nutrition, and veterinary medical guidance increasingly are living to an advanced age. Caring for an elderly dog can be both emotional and physically demanding. Some tips for helping your geriatric dog:

To help assure comfort for arthritic dogs: provide elevated food and water bowls; padded steps or ramps; heavy padding for beds; heating pads in winter when floors are cold; Astroturf on outdoor runs; elbow pads to cushion joints while the dog is lying down or sleeping. For mobility assistance: use booties with non-skid bottoms; or tacky-feet to the paws. Use plastic mats and sheets to deal with urine leakage in dog beds; enzymatic cleaners for clean up; install doggy doors for the dog to let itself outside. A quick and easy way to dispense medication is to give pills in canned pumpkin or peanut butter.

Remember ~ older dogs tend to sleep longer and more soundly. It is necessary to check more frequently for skin abrasions and ulcers created by lying in one position for so long a time.

### *Protecting your right to responsibly own and breed animals.*

For more information on animal health, training, reports on pet issues, animal sheltering, or to learn the difference between animal welfare and animal rights – visit our website at [www.ncraoa.com](http://www.ncraoa.com)

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