

## **News from CARE Research, LLC**

**Combining Compassion and Quality** 

### June-July 2012

# **Message from the President**



This year has brought some very interesting and challenging projects to CARE. One of these is a study to treat obesity in dogs. Obesity is an issue not only for humans but also for companion animals such as dogs. This leads to diabetes, high blood pressure, heart disease and other complications in dogs as well as humans.

Our goal at CARE is to provide the most comprehensive biomedical research and innovative solutions. We continually strive to advance our partnerships and equipment, as outlined in this issue, to meet the needs of our clients.

In this issue:

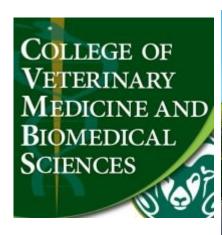
Message From the President Partnership with CSU Dog Obesity Study Research Updates Sincerely,

Rajan Bawa, Ph.D Chief Technical Officer, CARE Research, LLC President, Colorado Histo-Prep

## **Research Partnerships**



One of CARE's particular research advantages is its partnership with Colorado State University (CSU). As one of the top veterinary schools in the country, CSU has expert personnel, facilities and equipment that we are able to access. Given CARE's proximity to CSU we are able expand our capability and efficiently collaborate to achieve the most comprehensive research possible.





CSU College of Veterinary Medicine and Biomedical Sciences, Fort Collins, CO

# **Dog Obesity Study**

### **Adipose Indices**

Total Body % Fat Fat Mass/Height

Android/Gyniod Ratio

% Fat Trunk/% Fat Legs

Truck/Limb Fat Mass Ratio



Dog DexaScan at CSU

behavior.

CARE is currently conducting a comprehensive client project that investigates the feeding behavior of obese dogs with and without treatment by an appetite suppressing compound. To fully analyze the data we are examining a variety of out-puts including the following:

- Adipose Indices
- DexaScans
- Urinalysis

### About CARE

In vivo laboratory services

Surgical suite

All species

**Support Services** 

Feed lot pen/pasture

Specialized Models:

**Ophthalmic** 

**Arthritis** 

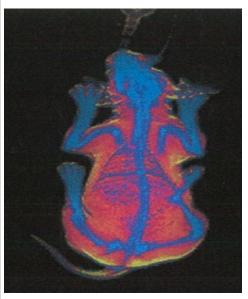
**Implants** 

Laminitis

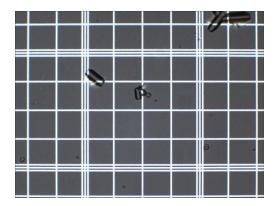
For this project we collaborated with the Colorado State University's Small Ruminant Comparative Orthopeadic Laboratory at the College of Veterinary Medicine and Biomedical Sciences quantifying the percent body fat of the dogs using DexaScans. The availability of a state of the art "Dexascan" machine enabled us to visualize and quantify the percentage body fat of the dogs and correlate the numbers with the feeding

This study necessitates 24 hour around-the-clock observation, for more than a month of the feeding frequency and length of each feeding. We enhanced our capabilities in order to fully document this behavior by installing state-of-the-art video cameras and an extensive recording system. This should serve us in good stead for future behavioral studies. We are quantifying the percent body fat of the dogs using dexascans.

### **Full Range of Data Analysis**



DexaScan of dog body composition



Canine urine with crystals

## **Research Updates**

CARE's **Good Laboratory Practice** management

system ensures the

uniformity, consistency,

reliability, reproducibility,

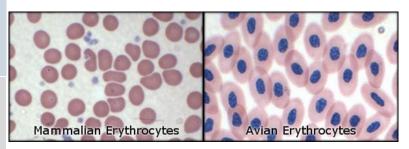
quality, and integrity of

results.

Throughout the last six months we have continued to work on two studies previously identified in our publications. As we work with each client to customize their projects we advance biomedical research together.

#### **Avian Blood Research**

Our team at CARE has completed the avian blood study, started in 2011, with significant findings. We were able to develop a special technique to analysis the blood components. CARE is one of the few labs in the country that is able to manually count and quantify avian red blood cells under GLP conditions.



### **Agricultural Species**

CARE includes facilities for sheep, cattle, horses, and poultry.

Feedlot Pens

Feedlot Kalen Gates

Pasture

Isolation/Recovery Rooms

#### **Kidney Catheterization**

At CARE we are continuing to make advances with the individual ureter intubation model. We have found crystallization at higher drug concentrations than we had tested earlier. This was in keeping with anticipated results in urinalysis.







twitter.com/#!/histopath



#### Contact

www.careresearchllc.com (970) 493-2660 dblack@careresearchllc.com