



Pre-clinical Expertise

Efficient | Accurate | Responsive

April-June 2013

Message from the President



For the entire month of February, I had the distinct honor and pleasure of being one of the members of a Rotary Friendship Exchange team from our District 5440, that visited India. I participated in the NID (National Immunization Day) campaign, in Patna, Bihar hosted by District 3250. This was the kickoff for a nationwide campaign of periodic revaccination that involves Rotary, UNICEF, WHO and 135,000 volunteers (young women with coolers, braving the heat and rain, going door-to-door with the precious vaccine that needs to be refrigerated). The 2013 message of Rotary "Peace Through Service" gels very well with the mission of CARE and CHP (Combining Quality with Compassion), which is to provide in-vivo & ex-vivo testing services to the pharmaceutical and biotech industries to enable the development of new drugs (including vaccines) and devices to save lives and better their quality.

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Sincerely,
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Medical Device Pre-clinical Services



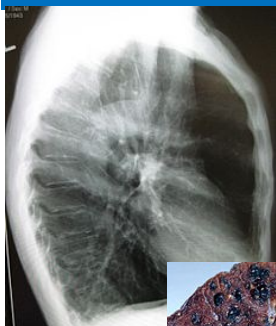
Hanford™ Miniature Swine at CARE Research

CARE Research is currently conducting a respiratory project to evaluate a novel device to treat emphysema. The study is being conducted specifically on Hanford™ Miniature Swine, a fully pedigreed, purpose-bred line of pigs. CARE's expertise with medical devices in multi-species projects is crucial—the pre-clinical data collected will determine whether the device can be marketed in the US and also to broaden it's application for indications for use both in the US as well as in Europe.

Emphysema is a disease of the "lung tissue caused by destruction of structures feeding the alveoli, in some cases owing to the consequences of Alpha₁-antitrypsin deficiency"alpha 1-antitrypsin deficiency. The anteroposterior diameter of their chest may increase; this sign is sometimes referred to as "barrel chest." They may lean forward with arms extended and/or resting on something to help them breathe ("orthopneic breathing").

continued

Medical Device Pre-clinical Services (continued)



When lung auscultation and chest percussion is performed a hyperresonant sound is heard. The person may also exhibit symptoms of hypoxia-induced cyanosis, or the appearance of a blue-to-purplish discoloration of the skin, because of increased levels of deoxyhemoglobin in the blood.



Emphysema is a significant health crisis as an estimated 3.1 million Americans have been diagnosed with the disease which is estimated to kill more than 120,000 Americans each year. Smoking is the major cause, but air pollution and other environmental factors also contribute to the numbers.

Advances in Tissue Culturing Services



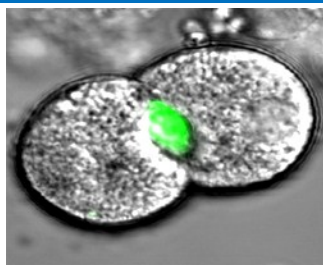
Colorado Histo-Prep (CHP), CARE's sister company, recently expanded its services by adding tissue culturing capabilities to screen parenteral formulations to aid in the choice of the optimum

formulation. The optimized formulation needs to demonstrate the least amount of toxicity in cultured cells. Subsequently, the optimized formulation will be tested by conducting in-vivo animal studies using rabbits and dogs.

CARE & CHP are able to build on each organization's specialty and streamline formulation development. This enables our clients to fully utilize their resources and limit downtime—putting animal testing on hold by CARE while CHP is helping to optimize the formulation; then returning back to CARE for animal studies with the optimized formulation.

[Integrating Histopathology and Clinical Pathology
www.histoprep.com](http://www.histoprep.com)

Project Conclusions



CARE conducted 3-month NDA enabling studies (rats and dogs), and follow-up DART studies in rats and rabbits. The project has recently concluded and the results are very encouraging. These are supplemented by the promising results that the sponsor collected in Phase-II clinical trials conducted internationally at multiple sites (the continuation of which was enabled by our study results).

What Our Clients Are Saying...



"I want to write to say how happy I am with Susan's work on recent studies. She is super flexible, responsive, and adapts to all our last-minute changes. And for example, she completed the in-life report faster than we got the analytics!"

Recent client

Meet Our Team



Lindsay Tearman, Quality Assurance Manager, CARE/CHP booth at the SOT Expo in Antonio, Texas, March 10–14, 2013. CARE/CHP have had a booth at SOT for 26 years and always look forward to networking with our sponsors and the Tox community every year.

Lindsay Tearman, Quality Assurance Manager

B.S. Zoology and Integrative Organismal Biology, Colorado State University (2004)

Originally from Texas, Lindsay brings four years of experience as a Radiochemist and Data Analyst for ALS (formerly Datachem, Inc). In her work at ALS, she performed a wide variety of separation chemistry, isolation of radioactive analytes, and analyzed data by liquid scintillation, alpha spectroscopy, gas flow proportional counter, and gamma spectroscopy. She also reviewed new processes and drafts for development of new methods of chemical separation and ran trials that analyzed innovative new ways of obtaining data. Through her experiences, Lindsay has acquired excellent laboratory skills and an amazing ability to work with a wide variety of personnel and clientele. She works consistently with technicians and pathologists to promptly provide clients with well audited data for both GLP and nonGLP projects.

Péter Bodig, Laboratory Coordinator

B.S. Biology, Fort Lewis College (1993)

ASCP Board Certified Histotechnician (2005)

Drawing from over fifteen years of laboratory experience, Péter oversees the day-to-day functions of the lab. His past experience with special staining, immunohistochemistry, and anatomy help him keep things running smoothly in the lab. He is fully trained on trimming, embedding, microtomy, staining, special stains, and slide check-out. Péter is actively involved in meeting study deadlines and accommodating special requests, including the development of novel techniques to meet special study designs. Additionally, Péter works as a liaison between the study sponsor, director, QAU, pathologists, management and technical staff to oversee the entire study process from wet tissue to pathology.

Frank Aquino, Chief Histologist

ASCP Board Certified HT(1970), HTL (1982)

Frank has over 35 years experience in histology. His extensive background includes histology, tissue culture and animal necropsy at Abbott Laboratories and Industrial Biotest Contract Research Laboratories where he progressed to the position of Lab Director. Subsequently, Frank honed his technical and supervisory skills at Colorado State University, ranked second in the nation as one of the top Veterinary Teaching Schools, where he held various positions of increasing responsibility including Senior Technician, Supervisor of the beagle research laboratory, Histology Laboratory Coordinator and Supervisor of the Pathology Diagnostic Laboratory.



About CARE

22 Acre Facility

Acute & Chronic Toxicology

ADME Studies

Toxicology, Feed, Range
Finding

Multispecies TK & PK

Developmental & Reproductive
Toxicology