

## **Call for Abstracts:**

It is our great honor to announce that the 2009 International Sirenian Conservation Conference will be held by The Georgia Aquarium in collaboration with The Marine Mammal Research and Conservation Program at Harbor Branch Oceanographic Institute on March 23-24, 2009, in Atlanta, GA. Topics of the conference consist of Current Field and Laboratory Research, Management Perspectives, and Veterinary Aspects of Rehabilitation and Release. We invite all interested prospective presenters to submit abstracts for consideration by February 15, 2009 to the scientific committee. Please submit abstracts to Dr. Juli Goldstein at [jgolds31@hboi.fau.edu](mailto:jgolds31@hboi.fau.edu). If you need any additional information please do not hesitate to contact the conference organizer: Dr. Juli Goldstein [jgolds31@hboi.fau.edu](mailto:jgolds31@hboi.fau.edu) or Dr. Gregory Bossart: [gbossart@georgiaaquarium.org](mailto:gbossart@georgiaaquarium.org)

## **Instructions to Authors:**

Each submitted abstract must include the title, author, address, body of abstract, literature cited and corresponding author contact information using the format shown below. Please list the full first and last names of each author. In cases of multiple authors, superscripts should be used to identify the authors with their affiliations and addresses. The name of the presenter should be listed first. Skip two lines (1 double space) and then type the abstract. Abstracts must concisely describe the study or topic in detail. Emphasis should be on results, even if the study is not yet concluded. Develop the abstract in Word or WordPerfect in a Windows format, using one-inch margins, double spaced and Times New Roman, 12-point font.

### *Example Abstract:*

Ongoing Investigations of the Etiopathogenesis of *Kogia spp.* Cardiomyopathy

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Cardiomyopathy (CMP) was first described in pygmy (*Kogia breviceps*) and dwarf (*Kogia sima*) sperm whales in 1985 within a group of (29) beached whales. This disease in *Kogia spp.* has been described primarily in whales from the southeastern Atlantic Ocean, but it also occurs in Pacific Ocean whales. The etiopathogenesis of the *Kogia spp.* CMP is unknown. However, distinct clinical, functional and pathologic patterns of CMP occur in domestic animals and humans, and each pattern may be associated with a distinct etiology. While each form of CMP in these species is fundamentally different, they are not necessarily mutually exclusive in a given case. Interest in the etiology and pathogenesis of CMP is ongoing as *Kogia spp.* are the second most common single-stranded cetaceans in the SEUS after the bottlenose dolphin (*Tursiops truncatus*). To date, we have been able to further characterize the pathologic features of the cardiac lesions found in *Kogia spp.* and began to explore potential factors contributing to the etiopathogenesis of CMP. In our pathologic study we found new evidence indicating that *Kogia spp.* CMP is a chronic progressive condition rather than an acute terminal event (Bossart et al., 2007).

Although the etiopathogenesis of various forms of cardiomyopathy have been well described in numerous mammalian species including canines, felines, pinnipeds, otters and humans; these observations have not been documented in *Kogia spp.*, and limited information is available for cetaceans. Several clinicopathologic parameters have been correlated with the types of CMP in terrestrial species including

the stress, hypertrophic, dilated or restrictive forms. We initiated a pilot study in 2005 to examine the following parameters in *Kogia* spp. known to be associated with CMP in terrestrial mammals: hematology and serum chemistry analytes, catecholamines (epinephrine, norepinephrine), dopamine, amino acids (L- carnitine, taurine), vitamins (selenium and thiamine), as well as circulating troponin I (TnI) parameters. Serum samples were provided by members of the Southeast United States Marine Mammal Stranding Network and the analyses of these samples yielded some interesting trends and findings. With a limited sample size, we found evidence to suggest the following potential conditions in whales with CMP: 1) changes in serum chemistry analytes consistent with right-sided congestive heart failure (RCHF) in whales; 2) elevated catecholamines supportive of acute stress reactions in whales with myocardial degeneration (MCD); and (3) counterintuitive data showing increased amino acid and vitamin levels in whales with cardiac disease.

Currently, we are expanding this study by sampling each stranded whale in a consistent manner, thereby increasing the sample size, statistical power and scientific validity of our analyses for potential etiologies of CMP. These findings will continue to yield important insights as to the potential cause of CMP in captive and free-ranging *Kogia* spp. They will also enhance our understanding of the relationship between CMP and individual stranding as well as larger scale mortality events

Literature cited:

Bossart, G D, Hensley G, Goldstein J D, Kroell K, Manire C A, Defran R H, Reif JS. *Cardiomyopathy in Stranded Pygmy (Kogia breviceps) and Dwarf (Kogia sima) Sperm Whales*. 2007 *Aquatic Mammals* 33(2)214-222

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