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2013 Grants-in-Aid of Research Final Report

Ontogeny, asymmetry and sexual dimorphism on odontocete cetaceans

With the help of the Grant awarded by the SMM, I could travel to the National Museum of Natural History (Smithsonian Institution), during September and October of 2014. During my stay in the museum, I was able to scan skulls of the following species of dolphins: *Inia geoffrensis*, *Tursiops truncatus*, *Delphinus delphis*, *Peponocephala electra*, *Steno bredanensis*, *Stenella attenuata*, *Stenella coeruleoalba*, *Lagenorhynchus australis*, *Lagenorhynchus obscurus*, *Lagenorhynchus acutus*, *Lagenorhynchus albirostris*. Based on the data collected (three dimensional landmarks) I will study cranial ontogeny of the species mentioned, making a comparative study, framing the knowledge in an evolutionary, ecological and behavioral context. I am currently developing appropriate statistical analysis to study the ontogenetic development of symmetric and asymmetric components of shape, as well as sexual dimorphism. The visit to the museum was very positive, not only because of the valuable data collected, but also because I visited one of the most important collections of cetaceans in the world, I got to meet the people who work there, and learn how they work and manage the collection.