

**Lazaro Vinola Lopez: Earth Sciences**

**Mentor: David Varricchio, Ross MacPhee -- Earth Sciences, American Museum of Natural History**

***Fossil record of the Rock Iguana genus Cyclura (Family: Iguanidae) in Cuba: implications for its systematics, paleoecology, and paleodistribution***

The West Indies is one of the areas with highest biodiversity and number of endanger species in our planet. Circumscribed to this area is the genus of Rock Iguanas, *Cyclura*. For very long time, it has been study to understand dispersion and speciation models that take place on islands. New fossils remains from three Quaternary deposit in western Cuba have shown the presence of an unknown giant species of *Cyclura* that coexisted with the living specie *Cyclura nubila*. Morphological comparison with another eight species from the Antilles and histologic comparison between this *C. sp.* and fossils and modern remain of *C. nubila* is used to determinate the taxonomic status of the specie. Interspecific competition, extirpation, extinction and response to human modification of both taxa in Cuba, has further implication for the conservation of the other species, most of them under critical status of conservation.