## 4<sup>th</sup> INTERNATIONAL WORKSHOP ON **TAXONOMY OF ATLANTO-MEDITERRANEAN DEEP-SEA & CAVE SPONGES**



## Cuban Mesophotic Reef Sponges: Challenges, Novelties, and Opportunities – Part II: Demospongiae, Homosclerophorida, and Calcarea Diversity.

<u>María Cristina Díaz</u><sup>1</sup>, Shirley A. Pomponi<sup>1</sup>, María R. García–Hernández<sup>2</sup> & Linnet Busutil<sup>3</sup>

<sup>1</sup>Harbor Branch Oceanographic Institute–Florida Atlantic University, Fort Pierce, Florida, USA

<sup>2</sup>Centro Nacional de Áreas Protegidas, Playa, La Habana, Cuba

<sup>3</sup>Instituto de Ciencias del Mar, Departamento de Biología, Playa, La Habana, Cuba

A joint Cuba-U.S. research cruise was conducted from May 14 to June 12, 2017 to survey deep mesophotic reefs of Cuba during 42 dives at 35 unique sites. Two hundred and ninety six morphospecies have been distinguished after interpretation of field observations and photographs, with only six species assigned to Calcarea, six as Homoscleromorpha, and 286 to Demospongia. 115 morphospecies have been recognized to a species level (39%) while the rest (61%) have received either a generic or higher taxa assignations. Here we will present the most conspicuous species identified within Demospongiae subclasses Verongimorpha (24 morphospecies of the order Verongiida, two Chondrillida and one Chondrosida), Keratosa (13 Dictyoceratida and one Dendroceratida), the Heteroscleromorpha orders: Agelasida (23 spp.), Axinellida (10 spp), Poecilosclerida (9 spp.), Clionaida (8 spp.), Tetractinellida (17 spp.) Suberitida (4 spp.), Scopalinida (3 spp.), Polymastiida (3 spp.), and the calcarean and homosclerophorida species encountered. Here we introduce a dozen of potential undescribed species from the mentioned orders. The challenges, advances and potential opportunities to advance in the understanding of Cuban and Caribbean sponge fauna is discussed.