Abstract: Despite the importance of biodiversity in maintaining healthy ecosystems, human impacts are decreasing biodiversity due to habitat changes, over-exploitation of resources, the introduction of invasive species, pollution, and climate change. Given these pressures, we need to understand the drivers and distribution of biodiversity at different scales. I’m interested in the mechanisms that promote and maintain species diversity, and in this talk I will discuss different aspects of my work related to; 1) challenges in assessing species distributions and diversity of organisms that are less studied, smaller or hard to find, such as parasites; 2) how species attributes’ affect the way species interact with the environment and could generate contrasting responses to environmental change in marine invertebrates; 3) how we can integrate information on species diversity with data on human impacts to identify hotspots of diversity in the coastal ocean that are being threatened by a combination of stressors.

Bio: Paula is currently a Research Collaborator at the Smithsonian National Museum of Natural History. She did her undergraduate at the Universidad Nacional de Córdoba in Argentina, a MS and PhD at the Pontificia Universidad Católica de Chile in Chile, and a postdoc at the Odum School of Ecology at the University of Georgia in the US. Paula’s work has focused on how and by what mechanisms species’ attributes can explain species boundaries, species geographic ranges, and large-scale patterns of species richness, mostly in marine species. Her research has combined field work, wet-lab experiments, computational work, and analysis of large databases, compiling data on species richness, species distributions, species traits, and genetic data.