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Department of Marine Sciences Presents a Seminar by

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Mapping and characterizing enigmatic habitats in the last great wilderness on earth

The deep ocean is truly one of the most challenging and expensive habitats on earth to study. It requires a multi-disciplinary approach that bridges the scientific disciplines of physics, chemistry, geology and biology. Remote locations and crushing pressures at depth have historically hindered what we could achieve, but several decades of advancements in technology and analytical tools have enabled to ask increasingly complex questions about the deep ocean. Whilst relatively flat sedimentary plains dominate much of the deep seafloor, topographically complex biological systems such as those formed by cold-water corals and deep-sea sponges stand out as particularly interesting, diverse and functionally important. For much of the global ocean, and particularly the deep sea, the fundamental question of where marine habitats occur, how abundant they are and how many species there are in a given area is poorly resolved or entirely unanswered. This poses a substantial challenge for governments, managers and conservation agencies, who face an increased demand for access to marine resources. In this seminar, I focus on addressing two seemingly simple objectives; 1) can we locate functionally important corals and sponges in the greatest wilderness on earth? 2) Can we identify and quantify the environmental conditions drive their distributions? Using the latest in technology, ocean data assimilation and statistical modelling, we have made substantial progress towards answering these questions. Particularly, I focus on the use of marine species distribution modelling, improved data assimilation and ocean observation using benthic landers.

Host: Heidi Dierssen Time & Date: 11:00 am, Friday, February 7, 2020 Place: Marine Sciences Building, Seminar Room 103

If you are an individual with a disability and need accommodations, please contact 860-405-9152, 860-405-9087, or marinesciencesseminars@uconn.edu.

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