

# Oceanography Seminar

Dr. Les Watling

PROFESSOR

DEPARTMENT OF BIOLOGY

UNIVERSITY OF HAWAII AT MANOA

## “Finding Biogeographic Boundaries in the Sea: Alaska, Hawai’i and the Emperor Seamounts”

While compiling distribution data for deep dwelling corals we discovered that the species from Alaska and its Aleutian Islands Ridge differed completely from those found in Hawai’i and along the Hawaiian Ridge and into the Central Pacific. The distributional data suggested there must be a boundary, or transition, between the two faunas, perhaps caused by characteristics of the water, such as the temperature. There is essentially no difference in temperature, salinity, or oxygen values from north to south in the region of the North Pacific between Alaska and Hawai’i that could explain the differences in the fauna. The Emperor Seamount chain is the only place where there is seafloor at the same depth as along the Aleutian and Hawaiian Ridges. With funding from the Schmidt Ocean Institute and NOAA’s Office of Ocean Exploration, we explored the central part of the Emperor chain to see if we could find the boundary or transition between the two North Pacific faunas.

**Thursday February 27<sup>th</sup>, 2020 3:00p.m. MSB 100**