Explore Microbial Ecosystems of Deep-Sea Hydrothermal Vents

Abstract:

Laying 2 km below the sea level, the hydrothermal vents off the Washington coast have very distinct ecosystems. Despite of high temperature, high pressure, and high acidity, the microbes thrive in the extreme environment. In this talk, I will introduce the background of marine hydrothermal vents, and how researchers in the Center for Ecogenomics use new molecular tools and microscale devices to study the microbial ecosystem. Our products can serve as an in situ instrument within the cabled regional-scale underwater observatory that delivers real-time information from the seafloor to our desktops.