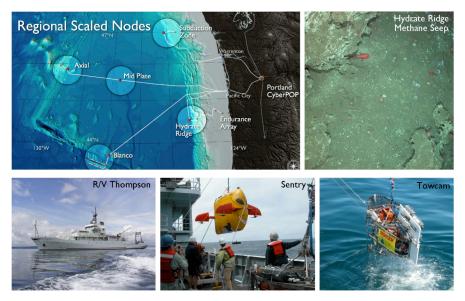
LUMEN'09

EXPEDITION ABOARD THE UW RESEARCH VESSEL THOMAS G. THOMPSON: AUGUST 1-15, 2009

Applications are open for student participation on a research expedition off of the WA-OR coast this summer on the R/V Thompson, August 1-August 15 using the state-of-the-art autonomous vehicle (AUV) Sentry and a deep-towed camera system. This expedition forms an important step in realization of the \$400M National Science Foundation's Ocean Observatories Initiative, and installation of the Regional Scale Nodes cabled observatory. The University of Washington will be building and operating this revolutionary underwater, high-power system that includes an electro-optical fiber network with hundreds of sensors (e.g. high definition cameras, robotic chemical profilers, mass spectrometers etc) distributed on the seafloor and throughout the water column off the WA-OR coast - all connected to the internet.



The expedition will use the AUV 'Sentry' to map the seafloor at submeter resolution and to provide detailed chemical-temperature information on ocean waters to depths of 3000 m. We will also utilize a deep-towed camera to image bubbling methane seeps, large tectonic faults, and biological communities along the WA and OR margin. Shipboard, lively discussions will provide background knowledge of the areas of operation and research being conducted. Participants will be involved in all aspects of sea-going research – operational planning, watch standing, data processing, and sampling. The operational area extends from south of Grays Harbor, WA to Newport, OR and >125 km offshore. This cruise will provide an excellent opportunity to gain important hands-on experience for students interested in ocean sciences, engineering-sensor design, and deep- to shallow-ocean exploration. To apply, please send a 1-page letter by May 25th to Michelle Townsend (mtown@u.washington.edu) outlining why you want to participate on the cruise, your GPA, major, and whether you are a freshman, graduate student etc.

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