



The Deep Subsurface Biosphere at North Pond: A Mid-Atlantic Ridge Microbial Observatory

K.J. Edwards (1), Wheat, G. (2), Bach, W. (3)

1. Marine Environmental Biology, University of Southern California, Los Angeles, CA, USA, kje@ucc.edu
2. University of Alaska, Fairbanks, USA, wheat@mbari.org
3. University of Bremen, Bremen, Germany, wbach@uni-bremen.de

The Integrated Ocean Drilling Program (IODP) proposal 677-Full “Microbiology of a Sediment Pond and the Underlying Young, Cold, Hydrologically Active Ridge Flank” (see <http://www.who.edu/science/MCG/edwards/NorthPond/NorthPond.html> for all documentation relating to IODP 677-Full) is actively engaged in the planning process for this deep-biosphere drilling leg, which will be scheduled for drilling in 2010. The drilling operations will include coring sediment and basalt and establishing the physical and technological framework for long-term manipulative experiments and measurements for this system. This will be accomplished by casing the borehole and deploying standard and novel instrumentation within two boreholes (CORK- II observatories). Plans for North Pond will be discussed against the backdrop of deep-biosphere achievements that have been made in the past decade, and those that have been made in the field of ocean crust hydrological research – the confluence of our knowledge based on experiences in this two areas sets the stage for North Pond, which we hope will serve as a model for deep biosphere research into the next decade.