



DRI is making inquiries for Ph.D. students interested in Subsurface and Radionuclide Microbiology

Las Vegas Campus



Division of Earth and Ecosystem Sciences

Applications are encouraged for a graduate research assistantship in microbial ecology/geobiology at DRI's Las Vegas campus beginning summer or fall of 2012. The start date is somewhat flexible, as an opportunity for employment prior to enrollment exists. The duration is at least three years with half-time monthly salary support of \$1,800 during the academic year for Ph.D. candidates and full-time support during the summer (combined about \$27,000/yr). Health insurance and tuition waivers are provided. Enthusiastic candidates with demonstrable research and academic productivity and backgrounds in microbiology, microbial ecology, geobiology, environmental chemistry, bioinformatics, or a related field should apply. U.S. citizenship is preferred due to DOE site and laboratory access requirements.

This position, funded through the U.S. Department of Energy or other entities, will examine the distribution, diversity, and survival mechanisms of deep life, in particular focusing on the possibility that subsurface terrestrial ecosystems may be supported by radiochemical reactions at DOE legacy waste sites. This novel mechanism for sustaining deep ecosystems has recently been established through related work in the world's deepest mines in South Africa (Science, **322**:275-8) and may be of practical relevance for understanding the mobility of actinide contaminants in subsurface aquifers.

The successful candidate will coordinate their efforts with those of a postdoctoral fellow at DRI and be part of an interdisciplinary team from Lawrence Livermore National Laboratory, UNLV, Princeton, The University of Toronto, Lawrence Berkeley National Laboratory, and Bigelow Laboratory.

This position, thus, provides an extraordinary opportunity for training and networking. Major field activities will involve sample acquisition from subsurface habitats altered by nuclear detonations at the Nevada National Security Site (NNSS, formerly the Nevada Test Site) or other locations, including the Sanford Underground Research Facility (SURF), Canadian and U.S. mines, exploratory boreholes, and oil and gas wells. Specific thesis objectives will include microbial community and genomic assessments of groundwater and rock samples, cultivation and characterization of relevant microbial phenotypes, and the development of laboratory microcosms.

To Apply:

The successful candidate will join DRI's Environmental Microbiology Laboratory at the Southern Nevada Science Center in Las Vegas and obtain their degree from the University of Nevada Las Vegas, most likely in the School of Life Sciences. Application packages (Feb 1st deadline for Fall) should be submitted to the UNLV School of Life Sciences Graduate Program and a copy sent electronically or hard copy to Dr. Duane Moser, Desert Research Institute, 755 E. Flamingo Rd, Las Vegas, NV 89119.

For information on how to apply please consult <http://sols.unlv.edu/prospective.html> and when completing the application, identify Duane Moser as your preferred mentor. All applicants will be expected to provide a statement of interest, undergraduate transcripts, and contact information for three academic or professional references. Information about DRI can be found at <http://www.dri.edu/>. To learn about UNLV and the School of Life Sciences (SOLS) go to <http://sols.unlv.edu/>. All candidates are encouraged to contact Dr. Duane Moser (Duane.moser@dri.edu), 702-378-7639 prior to applying to UNLV and with any additional questions.