

**Postdoctoral Research Associates in Microbial  
Physiology/Microbial Ecology**

**Biosciences Division  
Biological and Environmental Sciences Directorate  
Oak Ridge National Laboratory  
Oak Ridge, Tennessee**

ORNL10-04-BSD

**Project Description:**

A postdoctoral position is available immediately within the Biosciences Division at Oak Ridge National Laboratory (ORNL) (<http://www.ornl.gov>). The successful post-doc will apply, utilize and develop novel methods toward understanding the interactions between subsurface bacteria and metals (including heavy metals and radionuclides), the biotransformation of these metals, the resultant biogeochemistry, and the effect on the microbial community. Particular metals of interest include Hg, U, and Cr. Existing techniques will include controlled cultivation, ICP-MS analysis of methylated and non-methylated Hg, de-novo sequencing (e.g. 454) approaches for microbial community analysis, U(VI) KPA quantification, and high-density microarray analysis.

The successful candidate will join a multi-disciplinary team of investigators who apply advanced and integrated techniques to understand the physiology and ecology of microorganisms in support of US Dept. of Energy missions in remediation and systems biology. There will be opportunities to be involved in areas of this, and perhaps other projects, which will utilize several approaches. These range from biogeochemistry to metabolic modeling to cutting edge genomics in order to develop new ways of understanding the role of microorganisms in metal and radionuclide remediation.

**Qualifications:**

The position requires a Ph.D. degree with experience in microbiology, molecular biology, genetics, bioinformatics or related field. Experience or knowledge is highly desirable in anaerobic cultivation including steady-state bioreactors, metal quantification assays, bioinformatics, and work at the field level. Excellent analytical, problem solving, interpersonal skills are required, with outstanding written and verbal communication skills are requisite.

Applicants cannot have received the most recent degree more than five years prior to the date of application and must complete all degree requirements before starting their appointment.

**Technical Questions:**

For more information about this position please contact Dwayne Elias at <mailto:eliasda@ornl.gov>. Please reference the position title and number when corresponding about this position.

**How to Apply:**

Qualified applicants may apply online at [https://www2.ornl.gov/ORNL\\_POST/](https://www2.ornl.gov/ORNL_POST/). All applicants will need to register before they can begin the online application. For complete instructions, on how to apply, please see the instructions at <http://www.ornl.gov/orise/edu/ornl/ornl-pdpm/application.htm>.

This appointment is offered through the ORNL Postgraduate Research Associates Program and is administered by Oak Ridge Associated Universities (ORAU). This appointment is open to all qualified U.S. and non-U.S. citizens without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.