

# **Postdoctoral Research Associate in Data Integration**

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

ORNL09-80-BSD

### **Project Description:**

The Biosciences Division (BSD) of the Oak Ridge National Laboratory (ORNL) has an open postdoctoral position for individuals with training in Computational Biology or Bioinformatics to participate in research involving molecular structures and their dynamics. One such project involves the investigation of methods for protein fold prediction, docking and interface prediction. A second project involves simulation by molecular dynamics of protein and carbohydrate systems such as cellobiohydrolase I, cellulose, lignin, and other components of the microbial plant cell wall interface.

The successful candidate will perform independent and team research in computational structural biology, and will have an opportunity to participate in other projects in the area of computational systems biology from the Department of Energy, National Institutes of Health, and other funding agencies.

This position offers access to the world-class computing environment at ORNL's National Center for Computational Sciences, and the systems biology research programs at BESC based in the new Joint Institute for Biological Sciences in close collaboration with biologists and computational scientists working in collaborative and stimulating research environment. Joint appointments with relevant departments at the nearby University of Tennessee are possible.

### **Qualifications:**

This position requires a Ph.D. in Computer Science, biology, chemistry or related field with a strong background in molecular systems research and a detailed working knowledge of computational structural biology tools and methods, codes and methods for molecular modeling, molecular mechanics, ab initio methods, combined molecular mechanics and ab initio approaches, and coarse-grained and multi-scale simulations methods. The successful candidate will have outstanding communications and interpersonal skills, and will perform effectively in a dynamic, intellectually stimulating multi-disciplinary research environment.

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:**

Questions about the position may be referred to Dr. Edward C. Uberbacher at [uberbacherec@ornl.gov](mailto:uberbacherec@ornl.gov) or 865-574-6134.

**How to Apply:**

Qualified applicants must 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>. When applying for this position, please reference the position title and number.

This appointment is offered through the ORNL Postgraduate Research Participation Program and is administered by the Oak Ridge Institute for Science and Education (ORISE). The position is open to citizens or legal permanent residents of the US without regard to race, color, age, religion, sex, national origin, physical or mental disability, or status as a Vietnam-era veteran or disabled veteran.