About RCSB PDB

RCSB PDB is a world-renowned, scientific organization focused on serving technical, educational and other programmatic needs of scientific and research communities worldwide.

RCSB.org serves millions of users in academia and industry. The RCSB PDB development team, located at UCSD/SDSC and Rutgers, creates leading edge web technologies targeted for scientific and educational audiences.

About UCSD/SDSC

As an Organized Research Unit of UC San Diego, the San Diego Supercomputer Center (SDSC) is considered a leader in data-intensive computing and cyberinfrastructure, providing resources, services, and expertise to the national research community, including industry and academia. Cyberinfrastructure refers to an accessible, integrated network of computer-based resources and expertise, focused on accelerating scientific inquiry and discovery. SDSC supports hundreds of multidisciplinary programs spanning a wide variety of domains, from earth sciences and biology to astrophysics, bioinformatics, and health IT. SDSC launched Comet, a petascale supercomputer that joins the Center's data-intensive Gordon cluster. SDSC is a partner in XSEDE (eXtreme Science and Engineering Discovery Environment), the most advanced collection of integrated digital resources and services in the world.

1. Scientific Software Developer (UCSD)

The RCSB PDB is seeking a Scientific Software Developer with skills as a seasoned, experienced bioinformatics programming professional and a broad understanding of computational algorithms.

The incumbent will develop, implement, and maintain complex scientific and web-based software systems for the RCSB Protein Data Bank (PDB; <u>http://www.rcsb.org</u>) at the University of California San Diego (UCSD).

The Scientific Software Developer will work closely and collaboratively with other software developers and scientists at the San Diego Supercomputer Center (SDSC) and the RCSB PDB partner sites to expand RCSB.org's functionality and reliability as a premier biological data and information resource. S/he will develop new scalable algorithms for the mining and analysis of the rapidly growing PDB archive using leading edge Big Data technologies, design and implement user interfaces for the query, analysis, reporting, and visualization of 3D structural information and associated annotations, as well as integrate external database resources with RCSB PDB to provide a structural view of biology. The incumbent will help lead the design of databases and data warehouses to store and aid in the query of data and be actively involved in the software development process, maintenance and system standards for analysis algorithms, tools, and infrastructure.

Additionally, the incumbent will serve as an expert on relevant scientific and technical aspects of the various web, web services, and database components of the RCSB PDB. S/he will stay abreast of the latest development in structural and computational biology and new technologies, apply advanced bioinformatics concepts to design, develop, modify, debug, and evaluate highly complex software programs and web tools, and translate scientific problems into scalable and maintainable software solutions that meet end-user needs. The incumbent will also further science through Scientific Publications, written in collaboration with our team.

RCSB PDB is a friendly and collaborative working environment with excellent professional development opportunities. UC is committed to providing competitive compensation and benefits for all UC employees.

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