

Poster Presentation

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Educational Outreach and User Training at the Worldwide Protein Data Bank

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The Protein Data Bank (PDB) contains a wealth of structural and functional knowledge about proteins, RNA, DNA, and other macromolecules, and their assemblies and complexes with small molecules. The challenge faced by the providers of PDB data is to make this knowledge accessible to an increasingly large and diverse audience, ranging from expert structural biologists to non-specialist consumers of structural information. Educators, students, and general audiences will have their own specific interests and expectations from molecular structure data. For a general user, a 2D image of hemoglobin illustrates how a protein looks at a microscopic level. For high school students and educators, 3D models or computer graphics can show how one or a few specific proteins can assemble into an icosahedral virus. In contrast, PhD and post-doc level researchers require expert guidance on how to critically assess the quality of structural data, and in-depth training on the use of specialist tools and resources for the comparison and analysis of structures. The PDB archive is managed by members of the Worldwide Protein Data Bank (wwPDB): the Research Collaboratory for Structural Bioinformatics Protein Data Bank (RCSB PDB; rcsb.org), Protein Data Bank in Europe (PDBe; pdbe.org), Protein Data Bank Japan (PDBj), and BioMagResBank (BMRB, bmr.b.wisc.edu). In addition to managing and distributing structural data, the wwPDB partners are engaged in numerous outreach initiatives and user training programs. These efforts are vital to ensuring that these uniquely valuable data can be effectively accessed and used by research scientists, students, and educators alike. This talk will describe on-going wwPDB outreach efforts and highlight exciting new initiatives at the RCSB PDB, PDBe and PDBj.

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