Poster Presentation

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PDB-101: educational portal for molecular explorations through biology and medicine

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The online portal PDB-101 (http://pdb101.rcsb.org/) helps a broad community of teachers, students, and the general public to understand biology and medicine in 3D. PDB-101 materials ("101", as in an entry level course) are developed using the structures of proteins and nucleic acids available in the Protein Data Bank (PDB) archive. Paper models, the ongoing Molecule of the Month series, posters, animations, curricular modules, and other materials created by the RCSB PDB (Berman et al., 2000) support exploration and extended learning (Zardecki et al., 2016; Rose et al., 2017).

PDB-101 can be searched by molecule name or keyword. A Browse option displays all available resources, organized by topics such as immune system and renewable energy. A "Guide to Understanding PDB Data" is built around more PDB-specific information: PDB Data, Visualizing Structures, Reading Coordinate Files, and Potential Challenges (including biological assembly vs. asymmetric unit).

Another PDB-101 highlight is the Geis Digital Archive. Irving Geis (1908-1997) was a gifted artist and friend of the PDB who helped illuminate the field of structural biology with his iconic images. In collaboration with the Howard Hughes Medical Institute, RCSB PDB is publishing many of his illustrations in the context of their molecular PDB structures. Image are available for noncommercial reproduction. Image of lysozyme by Irving Geis used with permission from the Howard Hughes Medical Institute. All rights reserved (www.hhmi.org).

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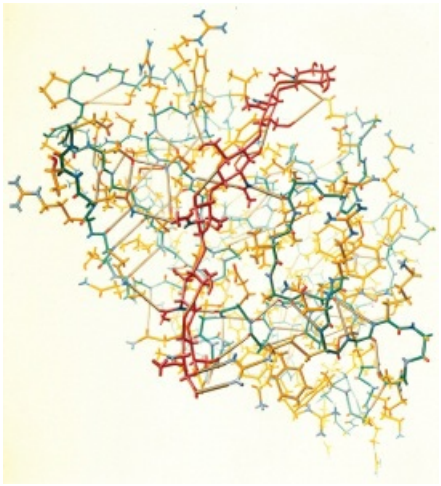

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