

Web watch

WHERE STRUCTURE MEETS FUNCTION

- <http://www.proteopedia.org>

Although structural biology can help us to understand the biological function of macromolecules, its use is limited by the fact that three-dimensional (3D) structures are often difficult to understand, even for structural biologists. Proteopedia, a recently launched user-friendly resource that places structural information in the appropriate biological context, now helps you to understand the 3D functions of your favourite macromolecules.

Proteopedia, which was first described in *Genome Biology*, is a wiki-based 3D encyclopaedia of proteins and other molecules that contains a page for each of the >50,000 entries in the Protein Data Bank. Rather than offering only text descriptions of the macromolecules, Proteopedia provides interactive 3D structures that can be rotated and explored by clicking on hyperlinks in the descriptive text. The hyperlinks change the images to better illustrate the concepts that are referred to in the text, thereby making even complex 3D structures comprehensible.

Developed by E. Hodis, J. Prilusky, E. Martz, I. Silman, J. Moult and J. L. Sussman, Proteopedia is freely accessible to all users, and does not require any software to be downloaded or installed. Members of the scientific community are invited to register, so that they can edit existing pages and create new ones. New entries are credited using the users' names, so that authors are acknowledged for their contributions and take responsibility for their entries.

The website also provides features that allow lecturers to develop tutorials and teaching material, which can be protected from unwanted editing by others.

Altogether, Proteopedia has the potential to convey complex 3D structural information in a manner that is accessible to a broad repertoire of scientists.

Francesca Cesari