



January 24, 2015

Re: archiving of integrative structures

To whom it may concern:

Integrative structural biology approaches are increasingly being used to obtain 3D structural models of biological macromolecules and the complexes or assemblies they form. The communities associated with individual structural biology techniques have developed publication standards, validation tools and model archives for their particular technique (*eg*, crystallography, NMR spectroscopy, electron microscopy, and small-angle scattering). The evaluation and archiving of "integrative structural models" that draw on data from multiple experimental techniques and novel modelling approaches presents a number of challenges. To address these challenges, the Worldwide Protein Data Bank (wwPDB; wwpdb.org) has recently formed the Hybrid/Integrative Methods Task Force, made up of experts in integrative modelling, traditional structural biology methods, and archiving (<http://wwpdb.org/task/hybrid.php>).

The Hybrid/Integrative Methods Task Force had its inaugural meeting in October 2014 where it considered whether the archiving of integrative models would be of value to the structural biology community and, if so, what kinds of data, meta-data and validation methods would be required. The event was reported in *Nature news* (<http://www.nature.com/news/data-bank-struggles-as-protein-imaging-ups-its-game-1.16196>) and a report summarising the Task Force recommendations is being prepared for publication in the journal *Structure*.

The Task Force made a strong recommendation that an archive for integrative models be established. Integrative models that have already been submitted to the PDB are currently on-hold awaiting a policy decision. The Task Force recommends that such models should not be processed or archived in the PDB at this point in time. Instead, they should be transferred to and processed by the future integrative data and model archive once it has been established. The Task Force also recommends that any integrative models currently in the PDB should be transferred to the future integrative data and model archive, and then removed from the active PDB archive. Atomic structures substantially determined using any combination of the "traditional" methods (*ie*, X-ray/neutron/electron diffraction, solution/solid-state NMR, and electron microscopy) will continue to be archived in the PDB, even if additional sources of information, such as SAS, were used.

Sincerely yours,

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