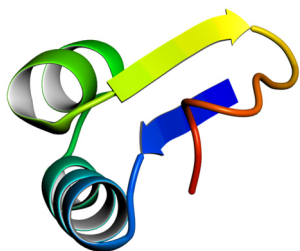
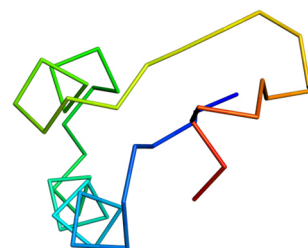


APPENDIX I: Example renderings using Molmil

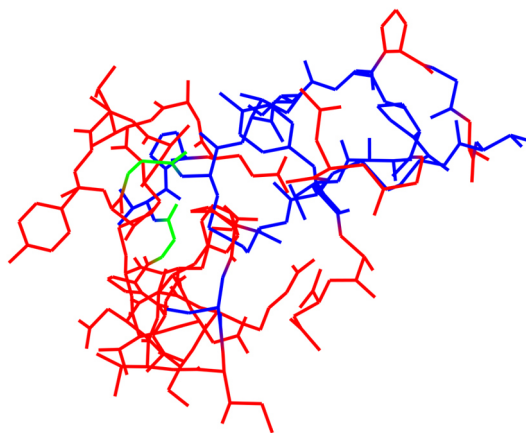
Cartoon rendering with group colouring of 1crn:



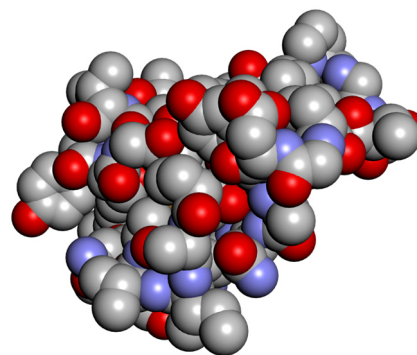
α trace rendering with group colouring of 1crn:



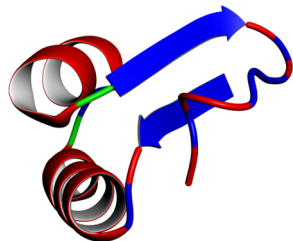
Wireframe rendering with ABEGO (30) colouring of 1crn:



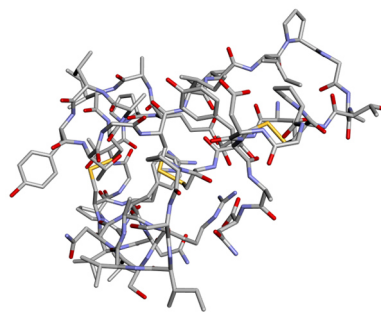
CPK rendering with element colouring of 1crn:



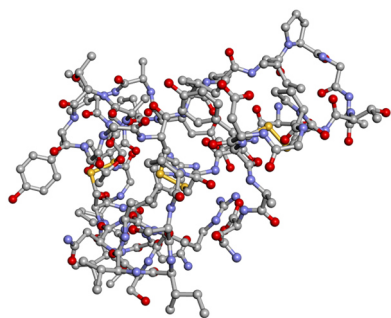
Cartoon rendering with ABEGO (30) colouring of 1crn:



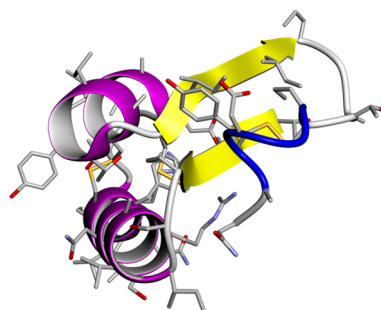
Stick rendering with element colouring of 1crn:



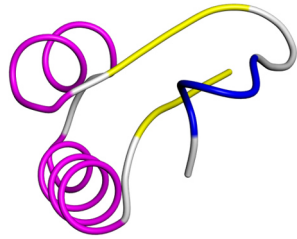
Ball-and-stick rendering with element colouring of 1crn:



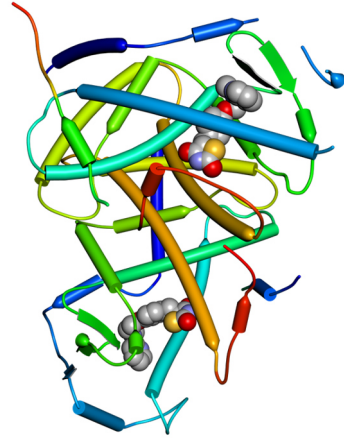
Cartoon rendering with side-chains as sticks with secondary structure and element colouring of 1crn:



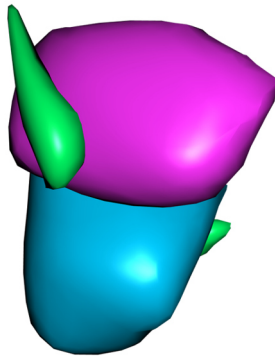
Tube rendering with secondary structure colouring of 1crn:



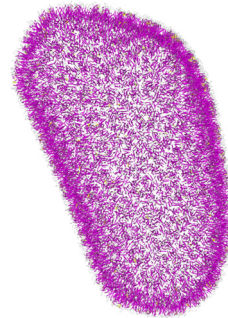
Rocket rendering with group coloring of 2prg:



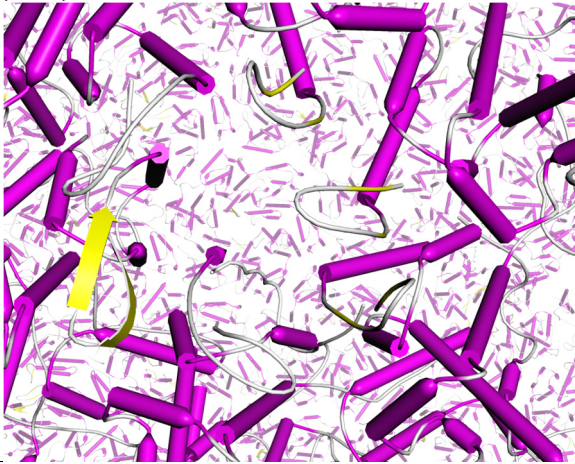
Coarse surface rendering with chain coloring of 2prg:



Rocket rendering (simplified) with secondary structure colouring of 3j3q:



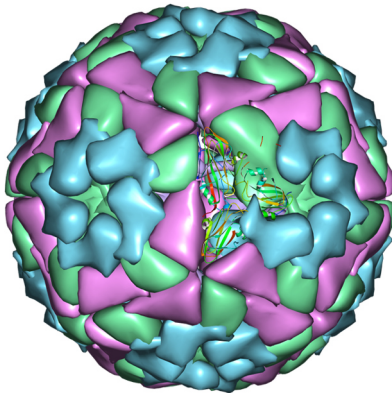
Rocket rendering (simplified) with secondary structure colouring of 3j3q (simplified) and fog to improve depth perception:



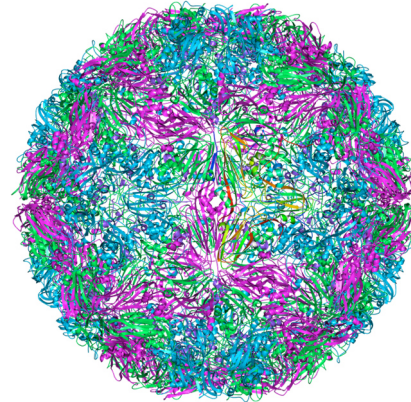
Coarse surface rendering with chain colouring of 3j3q (simplified):



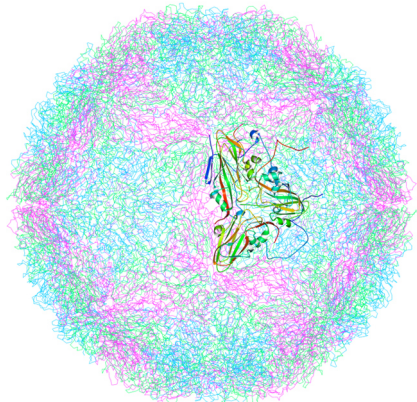
Cartoon and coarse surface rendering of the biological unit of 1bbt with group and chain colouring for the asymmetric chains and the remaining chains respectively:



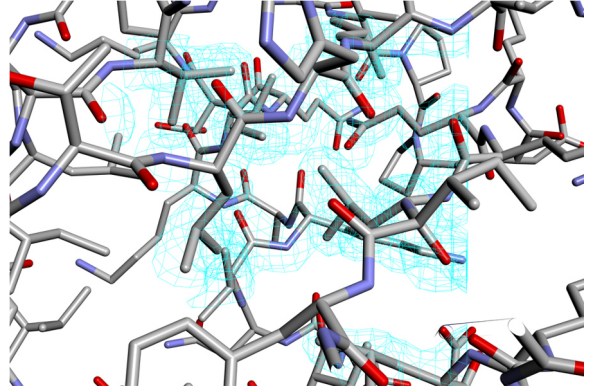
Cartoon rendering of the biological unit of 1bbt with group and chain colouring for the asymmetric chains and the remaining chains respectively:



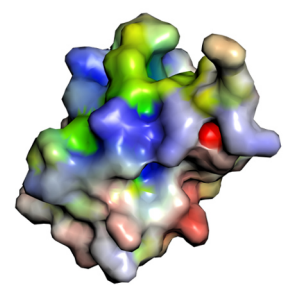
Cartoon and wireframe rendering of the biological unit of 1bbt with group and chain colouring for the asymmetric chains and the remaining chains respectively:



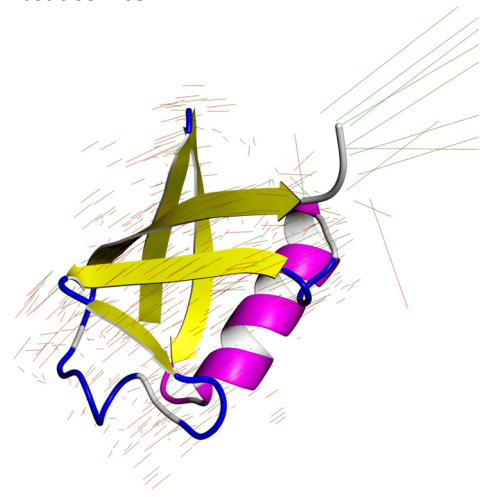
Stick rendering and iso-surface of the electron density of 1ubq, part of PDBj's EDMAP service:



Iso-surface rendering of 1ubq with the surface colored by electrostatic potential and hydrophobicity, part of PDBj's eF-site service:



Cartoon rendering of 1ubq with secondary structure colouring and displacement vectors, part of PDBj's Promode Elastic service:



APPENDIX II: Overview of alternative WebGL based molecular viewers

GLmol	Basic PDB viewer, one if not the earliest WebGL viewer http://webglmol.osdn.jp/index-en.html
JSmol/WebGL (31)	Limited functionality version of Jmol using HTML5+WebGL http://jmol.sourceforge.net/
PV (30)	PDB viewer developed by Swiss-Model and used by the RCSB https://github.com/biasmv/pv
3Dmol.js (32)	Developed by the university of Pittsburg. https://github.com/3dmol/3Dmol.js
NGL (33)	Developed by the Charité–Universitätsmedizin Berlin https://github.com/arose/ngl
ChemDoodle WC (34)	Commercial library (free to use) developed by iChemLabs https://web.chemdoodle.com/
Speck	High quality renderer for small molecules https://github.com/wwwtyro/speck
iCn3D	PDB viewer used by the NCBI https://github.com/ncbi/icn3d