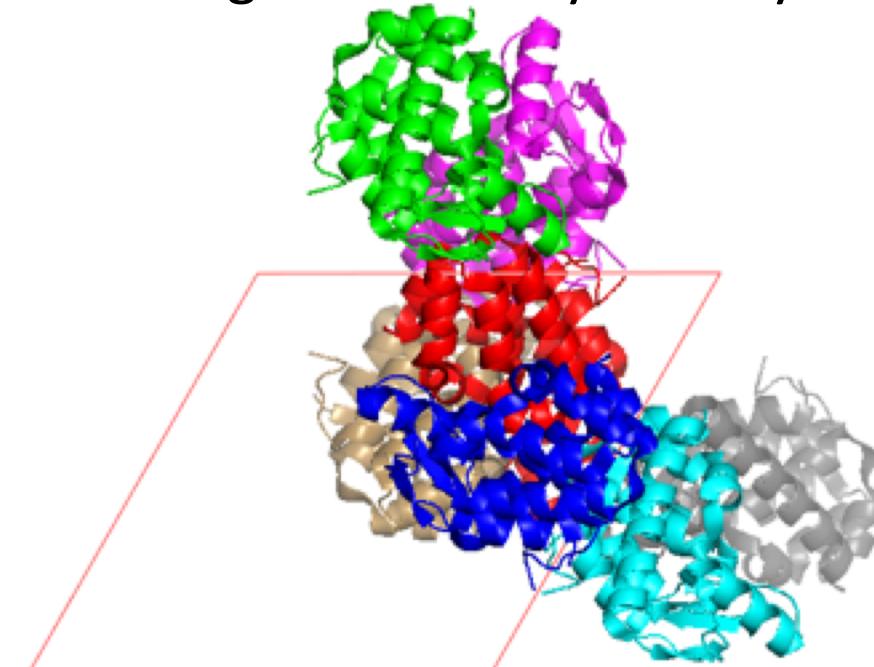
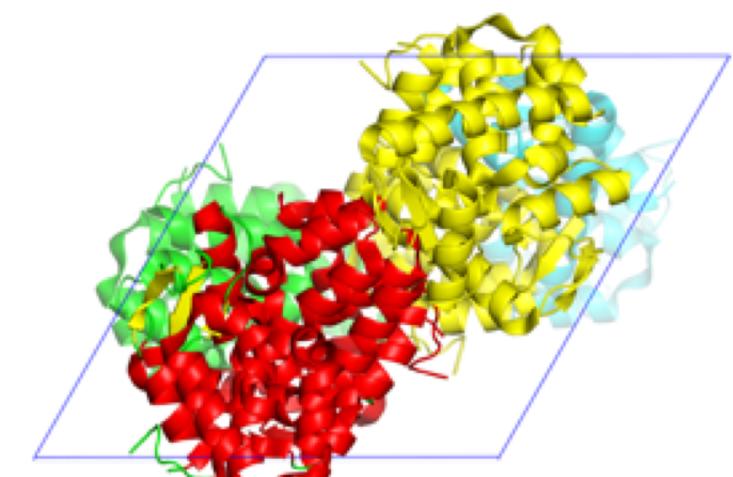


# PyMOL shortcuts

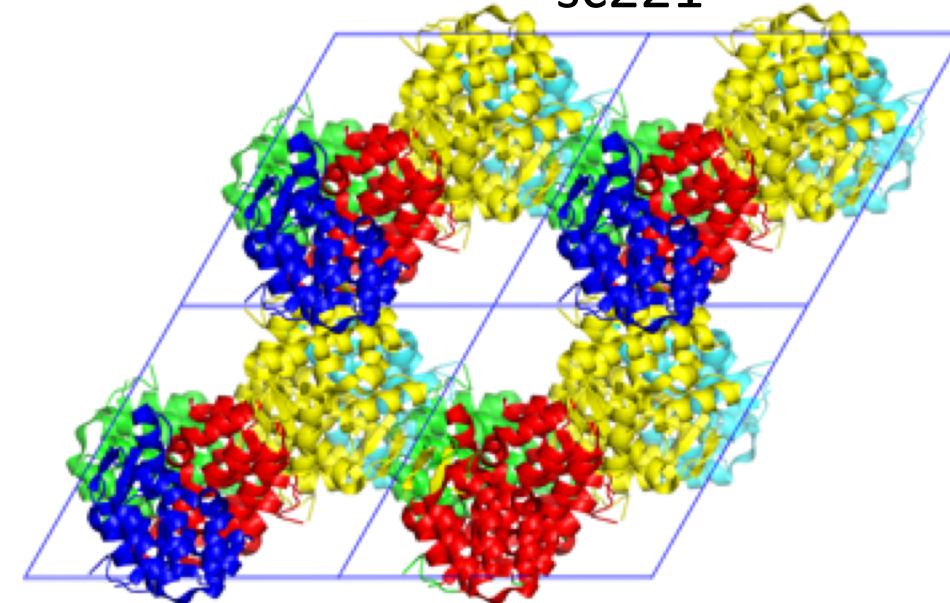
A -> generate -> symmetry mates



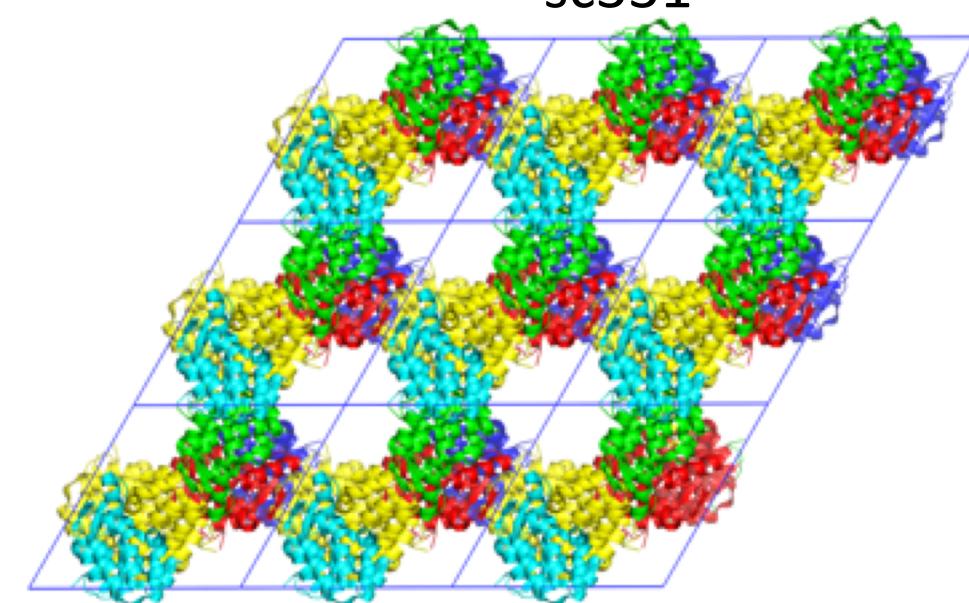
sc111



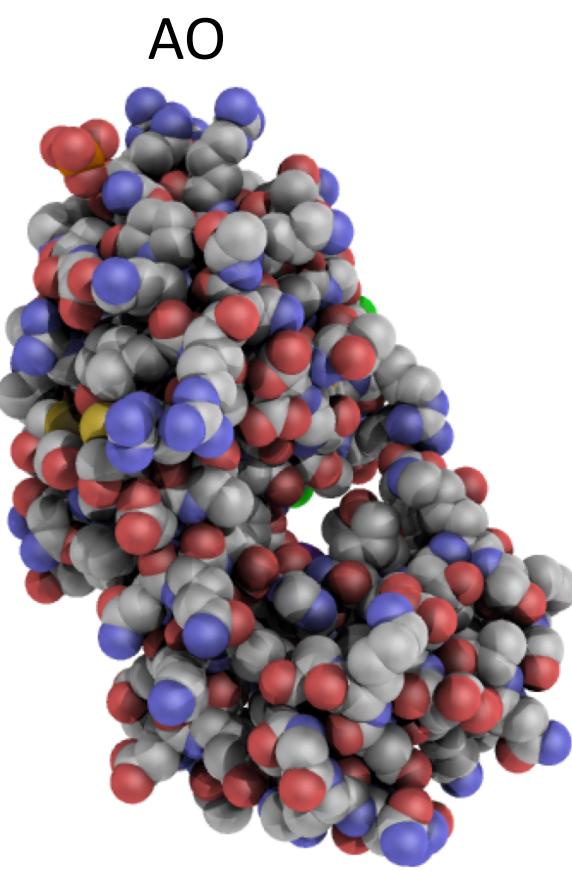
sc331



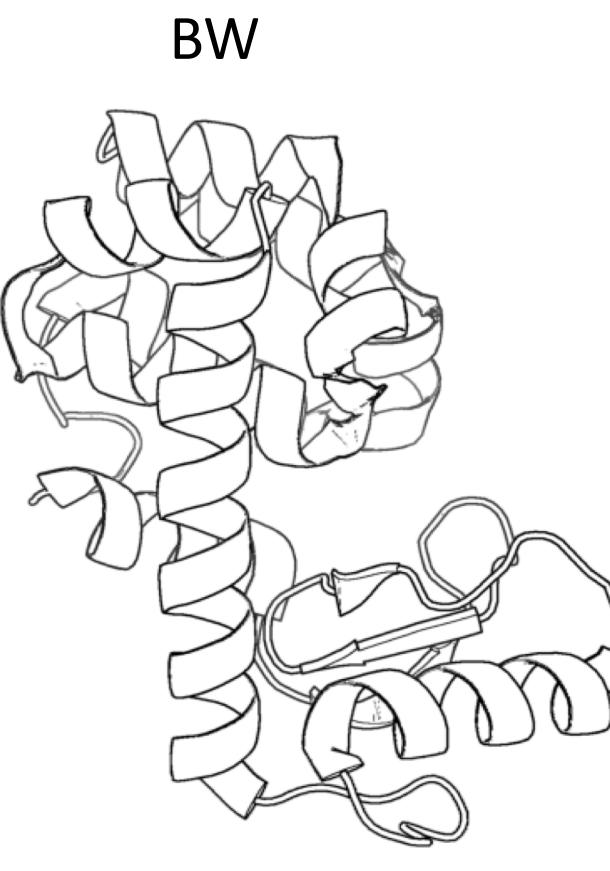
sc221



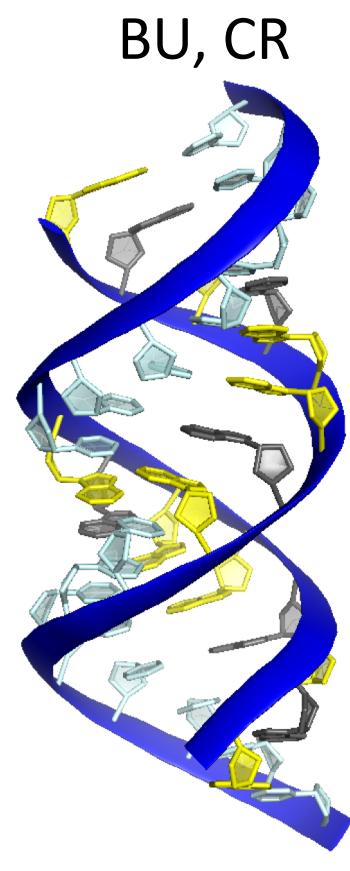
## Additional molecular representations



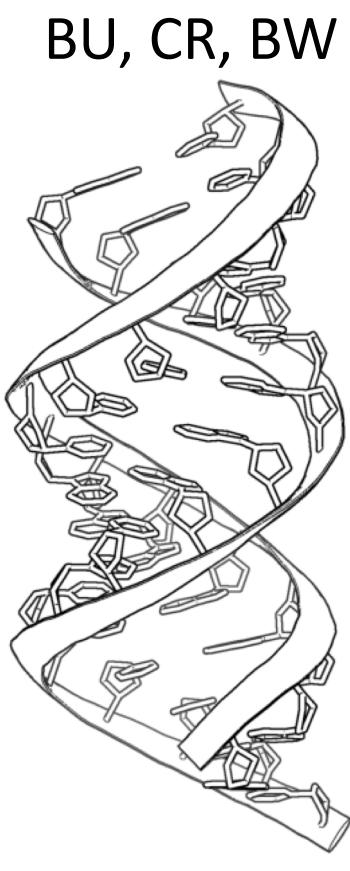
1lw9



1lw9



3nd3



3nd3

## Saving file with timestamp

PyMOL>spse t4l.pse

t4ly2019m06d03h11m31s39.pse

png, pqr, pdb, and all other file types

## Opening external programs

PyMOL>code # open test.pml with VSC

PyMOL>WS # open NWS page

PyMOL> RG RNA structure # search Research Gate for "RNA structure"

PyMOL>help(AO)

Help on shortcut AO:

**AO()**  
**DESCRIPTION**

Commands to make ambient occlusion image like those in Qutemole.

## USAGE

Type 'AO' to execute. Type 'help AO' to see this documentation printed to the command history window. Select from the command history individual lines of code to build a new script. Select the horizontal script at the bottom if retaining most of the commands in your new script. Copy and paste onto the command line below. Works only with the command line immediately under the command history window at the top of the gui.

September 16, 2016: modified colors of H and C atoms following the recommendation at <http://cupnet.net/ambient-occlusion-pymol/>.  
 Changed these two commands to address warnings from PyMOL:  
 Changed 'set depth\_cue, off' to 'set depth\_cue,0.'  
 Changed 'set light\_count,10' to 'set light\_count,8';

The commands with linebreaks:

```
set_color oxygen, [1.0,0.4,0.4];
set_color nitrogen, [0.5,0.5,1.0];
remove solvent;
as spheres;
util.cbaw;
bg white;
set light_count,10;
set spec_count,1;
set shininess, 10;
set specular,0.25;
set ambient,0;
set direct,0;
set reflect,1.5;
set ray_shadow_decay_factor, 0.1;
set ray_shadow_decay_range, 2;
set depth_cue, 0;
ray
```

Commands without linebreaks to be pasted on command line in PyMOL  
 (See Mooers 2016 Protein Sci. 25(10):1873-82.)

```
set_color oxygen, [1.0,0.4,0.4];set_color nitrogen, [0.5,0.5,1.0];
remove solvent;as spheres;util.cbaw;bg white;set light_count,8;
set spec_count,1;set shininess, 10;set specular,0.25;set ambient,0;
set direct,0;set reflect,1.5;set ray_shadow_decay_factor, 0.1;set
ray_shadow_decay_range, 2;set depth_cue,0;
color gray20, symbol c;ray
```