

PyMol Resources

Tutorials

Virginia Tech / Brown lab:

This video is the first tutorial of the Molecular Visualization Using PyMOL series from Bevan Brown Laboratory. In this tutorial, the User Interface is first explored and a simple, yet high quality render of a protein is created. This tutorial utilizes a free educational license for PyMOL. If you have a paid license or one provided from an institution, these instructions will be identical. This video is brought to you by Bevan Brown Laboratory and Data Bridge as part of Virginia Tech.

Entire Series Playlist: <https://www.youtube.com/playlist?list...>

Written Version: <https://docs.google.com/document/d/1t...>

Installation For PC: <https://youtu.be/feloy6lbrmo>

Installation For Mac: <https://youtu.be/Y-XcvVzqFuA>

For any issues that aren't solved in this video, try the PyMOL support page: <https://pymol.org/2/support.html>

Timestamps:

User Interface - 0:56

File - 1:13

Display - 3:54

Setting - 10:34

Scene - 13:31

Mouse - 15:20

Wizard - 16:08

Creating a Visualization: 19:16

Video #1

<https://youtu.be/aDmOe1ZgTz0>

This video is the second of the Molecular Visualization Using PyMOL series from Bevan Brown Laboratory. In this tutorial, measuring and labeling are explored. In addition, the end of the video contains a segment about interactions. Keep in mind the interactions at play will vary depending on the structure, and even though PyMOL lists something as an interaction, the science behind the interaction must check out. This tutorial utilizes a free educational license for PyMOL. If you have a paid license or one provided from an institution, these instructions will be identical. This video is brought to you by Bevan Brown Laboratory and Data Bridge as part of Virginia Tech.

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Installation For PC: <https://youtu.be/feloy6lbrmo>

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Resource For Interactions: <https://www.ncbi.nlm.nih.gov/pmc/arti...>

For any issues that aren't solved in this video, try the PyMOL support page: <https://pymol.org/2/support.html>

Timestamps:

Skip Intro - [0:36](#)

Measurements - [0:58](#)

Labeling - [8:40](#)

Finding Hydrogen Bonds (Optional) - [17:14](#)

For more guides visit the Bevan Brown Lab OSF Wiki: <https://osf.io/82n73/>

Author: Carter Gottschalk

Music provided by HearWeGo

Artist: Liam Thomas

Title: No Time Listen on YouTube: <https://youtu.be/QVwZmQkJ6Sw>

Video #2

https://youtu.be/EdncQA47_8Y

This video is the third of the Molecular Visualization Using PyMOL series from Bevan Brown Laboratory. This tutorial serves as a guide to making visualizations as aesthetically pleasing and functional as possible. The proper techniques for posing and coloring a protein to tell a story are explored. In addition, the end of the video houses a catalog for representation techniques that can be used. This tutorial utilizes a free educational license for PyMOL. If you have a paid license or one provided from an institution, these instructions will be identical. This video is brought to you by Bevan Brown Laboratory and Data Bridge as part of Virginia Tech.

Entire Series Playlist: <https://www.youtube.com/playlist?list...>

Written Version: <https://docs.google.com/document/d/1a...>

Installation For PC: <https://youtu.be/feloy6lbrmo>

Installation For Mac: <https://youtu.be/Y-XcvVzqFuA>

RCSB Website: <https://rcsb.org/>

Adobe Color: <https://color.adobe.com/>

For any issues that aren't solved in this video, try the PyMOL support page: <https://pymol.org/2/support.html>

Timestamps:

Skip Intro - 0:35

Positioning and Representation Types - 0:50

Coloring - 17:42

Representation Catalog - 30:41

Rendering Texture - 31:09

Shadows - 32:10

Fancy Helices - 33:13

Highlight Color - 33:37

Ray Trace Modes - 34:47

Adjusting Sizes - 35:49

Coloring Commands - 39:00

For more guides visit the Bevan Brown Lab OSF Wiki: <https://osf.io/82n73/>

Video #3

<https://youtu.be/szr6ZWIV8WU>

Schrodinger PyMol video tutorials:

Learn how to navigate the PyMOL interface and create a scene based movie.

<https://youtu.be/VnLPP97fQQw>

Learn how to morph a closed and open protein structure, change the position of a ligand within the PyMOL interface, and create an advanced movie.

<https://youtu.be/vcqqiTOZev8>

Learn how to align to protein structures, one with ADP bound and one without. Then perform APBS electrostatics calculations on these aligned structures to compare how ADP binding alters the electrostatic potential of the protein.

<https://youtu.be/mof4VvjROXk>

Learn how to identify residues within 5 Angstroms of a protein, mutate a residue, alter that residue's dihedral angles, and measure distances between atoms.

<https://youtu.be/H0ZLT52XEM0>