

WA10 – Viewing Cisplatin

Introducing Cisplatin

- Open PyMOL
- In the console, type the keyword 'fetch' and the entry '1a2e'.
- This will display a structure of DNA and with a bound cisplatin molecule.

Viewing Deformed Double Helix

- At the right hand side of the viewer, using the 'H' button next to 'all', hide everything to present a blank screen.
- Again next to 'all', use the 'S' button to show a 'cartoon' model of the DNA double helix.

Viewing Bond between Cisplatin and Guanine Base

- Again, use a previous instruction to hide everything once again.
- Next to 'all', use the 'S' button to show a 'lines' model of the DNA double helix with cisplatin.
- This should present a model of DNA with a bound cisplatin.
- To make the cisplatin molecule more visible, at the bottom right hand side of the viewer, use the 'S' button to bring up an overlay at the top of the screen.
- Scroll to the letter 'CPT' (standing for cisplatin) and left click – this will highlight the molecule.
- Over at the right hand side again, use the 'S' button next to '(sele)' this time and select 'sticks'.
- This will make the cisplatin molecule bold for ease of viewing.
- Zoom in on the molecule by holding down the right mouse button and moving the mouse.
- This will allow you to see the bond between cisplatin and two guanine molecules via coordinate bonds between a platinum atom (white) in the cisplatin and nitrogen atoms (blue) in the guanine.