

BIOINFORMATICS ASSIGNMENT 2 (Day 6 – 10)

NGS DATA QUALITY CHECK (DAY-6)

1. SRA accession number: **SRR24657790**

2. NGS Platform and layout:

No results found

3. Basic statics:

No results found

4. Per base sequence quality:

No results found

5. Per sequence quality score:

No results found

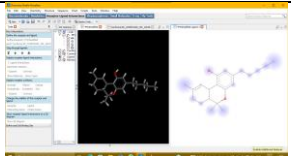
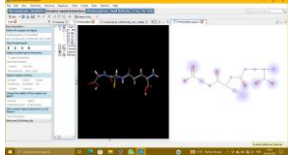
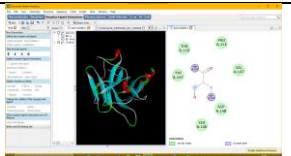
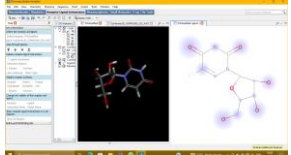
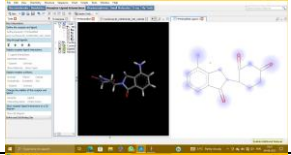
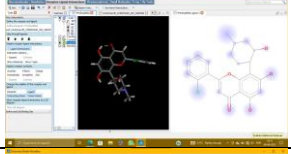

GitHub (DAY-7)

<https://github.com/Aary75n>

Molecular Docking (DAY-8 and 9)

Protein Name: Crystal structure of p53 Y220C covalently bound to carbazole
KG3

Protein ID: 8DC4

Ligand Name	Ligand ID	Energy Value	Dock Image - 2D
cannabis	CID16078	-7.0	
asparagus'	CID124886	-5.3	
red clover	CID72304	-7,1	NA
idealalisib	CID11625818	-8.1	
fluorouracil	CID9427	-5.8	
lenalidomide	CID216326	-6.6	
flavopiridol	CID5287969	-8.5	
ibrutinib	CID24821094	-8.2	

CANCER THERAPY (DAY-10)

Cancer Type	Hallmarks	Drug	Mechanism of drug
Breast cancer	Uncontrolled growth of breast cells, usually forming a tumor	Tamoxifen	Estrogen blocker
Lung cancer	Uncontrolled growth of lung tissue, often caused by tobacco smoking and exposure to environmental carcinogens	Erlotinib	Growth factor receptor (EGFR) blocker
Colorectal cancer	Uncontrolled growth of cells in the colon or rectum, typically starting as polyps	Oxaliplatin	Platinum based chemotherapy
Prostate cancer	Uncontrolled growth of prostate cells, often developing as adenocarcinoma	Enzalutamide	Androgen receptor inhibitor
Leukemia (CML)	Uncontrolled production of abnormal white blood cells in	Imatinib	Tyrosine kinase inhibitor

	the bone marrow.		
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