Molecular Modelling Summer Internships

Join Molecular Modelling summer internships to explore computational methods for simulating molecular structures and interactions, focusing on drug design, protein-ligand interactions, and the use of molecular dynamics in biological and chemical systems.

Focussed Areas under Molecular Modelling Summer Internship

1. Molecular dynamics simulations for drug design
2. Protein-ligand interactions and docking studies
3. Quantum mechanics and molecular modelling integration
4. Molecular modelling in biomolecular systems
5. Computational approaches to studying protein folding
6. Structure-based drug design using molecular models
7. Molecular simulations of enzyme catalysis
8. Energy minimization and molecular geometry optimization
9. Virtual screening for drug discovery
10. Homology modelling of protein structures
11. Multi-scale modelling in molecular systems
12. Molecular modelling in material science
13. Molecular mechanics and force fields in simulations
14. Biomolecular interactions in molecular modelling
15. Molecular docking for protein-drug interactions
16. Molecular modelling in nanotechnology
17. Free energy calculations in molecular simulations
18. Applications of molecular modelling in pharmacology
19. Molecular modelling in studying genetic mutations
20. Protein dynamics and conformational analysis

Protocols Covered across various focussed areas under Molecular Modelling Summer Internship

1. Molecular dynamics simulation protocols for drug design
2. Protein-ligand docking study workflows
3. Quantum mechanics integration in molecular modelling
4. Energy minimization and geometry optimization techniques
5. Homology modelling protocols for protein structures
6. Free energy calculation techniques in molecular simulations

7. Molecular docking workflows for virtual screening
8. Molecular simulations of enzyme catalysis
9. Multi-scale modelling workflows for biological systems
10. Molecular mechanics and force field application protocols

Duration: 5, 10, 15, 20, and 30 Days

Note: Please cross confirm whether internship slots for this field are available before joining.

Click Here for Molecular Modelling Summer Internship Fees

Application Process and Other info