

## **Molecular Dynamics Summer Internships**

Join Molecular Dynamics summer internships to explore the study of atomic and molecular motion, focusing on simulation techniques, computational models, and applications in drug design, material science, and biophysics.

## Focussed Areas under Molecular Dynamics Summer Internship

- 1. Molecular dynamics simulations for drug design
- 2. Protein folding and molecular interactions
- 3. Computational models for biological systems
- 4. Molecular dynamics in material science and nanotechnology
- 5. Biophysical applications of molecular dynamics
- 6. Simulation of ligand-receptor interactions
- 7. Energy minimization and molecular motion studies
- 8. Quantum mechanics and molecular dynamics integration
- 9. Molecular dynamics in studying enzyme kinetics
- 10. Molecular simulations for disease modeling
- 11. Multi-scale modeling of biological systems
- 12. Applications of molecular dynamics in structural biology
- 13. Simulation techniques for macromolecular assemblies
- 14. Molecular dynamics in membrane protein research
- 15. Temperature and pressure effects in molecular simulations
- 16. Applications in personalized medicine and pharmacology
- 17. Molecular dynamics in protein-ligand binding studies
- 18. Biomolecular simulations for drug target validation
- 19. Molecular dynamics of genetic material
- 20. Free energy calculations in molecular dynamics

## Protocols Covered across various focussed areas under Molecular Dynamics Summer Internship

- 1. Molecular dynamics simulation workflows
- 2. Protein folding and stability analysis protocols
- 3. Ligand-receptor interaction simulation techniques
- 4. Energy minimization and molecular motion protocols
- 5. Molecular dynamics for enzyme kinetics studies
- 6. Free energy calculations in molecular dynamics

- 7. Simulation protocols for biological macromolecules
- 8. Multi-scale modeling workflows for molecular systems
- 9. Quantum mechanics integration in molecular dynamics
- 10. Temperature and pressure variation protocols in simulations

**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 Dynamics Summer Internship Fees

Application Process and Other info