

## **Molecular Genetics Summer Internships**

Join Molecular Genetics summer internships to explore the structure, function, and inheritance of genes at a molecular level, focusing on gene expression, mutations, DNA replication, and genetic manipulation techniques for research and medical applications.

## Focussed Areas under Molecular Genetics Summer Internship

- 1. Gene structure and function in molecular genetics
- 2. Molecular mechanisms of DNA replication and repair
- 3. Gene mutations and their consequences
- 4. Regulation of gene expression and transcription
- 5. Molecular techniques in genetic engineering
- 6. Molecular genetics in hereditary diseases
- 7. CRISPR and genome editing technologies
- 8. Gene cloning and recombinant DNA technology
- 9. Gene silencing and RNA interference
- 10. Epigenetics and gene regulation mechanisms
- 11. Molecular genetics in cancer research
- 12. Genetic testing and molecular diagnostics
- 13. Molecular genetics in prenatal screening and therapy
- 14. Population genetics and genetic diversity studies
- 15. Gene therapy approaches for genetic disorders
- 16. Applications of molecular genetics in agriculture
- 17. Molecular evolution and phylogenetics
- 18. Bioinformatics tools for genetic data analysis
- 19. Gene-environment interactions in molecular genetics
- 20. Molecular genetics in forensic science

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

- 1. DNA extraction and amplification techniques
- 2. CRISPR gene editing protocols
- 3. Gene expression analysis using qPCR and microarrays
- 4. Molecular cloning and recombinant DNA techniques
- 5. RNA interference and gene silencing workflows
- 6. Molecular diagnostics for hereditary diseases

- 7. Epigenetics analysis in molecular genetics
- 8. Gene therapy vector development protocols
- 9. Bioinformatics tools for gene sequence analysis
- 10. Genetic mutation analysis and gene sequencing 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 Genetics Summer Internship Fees

Application Process and Other info