

## **Molecular Microbiology Summer Internships**

Join Molecular Microbiology summer internships to explore the molecular mechanisms of microbial life, focusing on microbial genetics, molecular techniques for pathogen detection, and the development of microbial-based solutions in health, agriculture, and industry.

### **Focussed Areas under Molecular Microbiology Summer Internship**

1. Microbial genetics and gene expression
2. Molecular techniques for pathogen detection
3. Antimicrobial resistance mechanisms
4. Molecular microbiology in infectious disease research
5. Gene regulation in microbes
6. Microbial biofilms and quorum sensing
7. Applications of molecular microbiology in biotechnology
8. Molecular approaches to studying microbial metabolism
9. Microbial interactions with the host immune system
10. Molecular techniques in environmental microbiology
11. Molecular diagnostics for bacterial and viral infections
12. Molecular microbiology in agriculture and soil health
13. CRISPR and gene editing in microbes
14. Microbial evolution and molecular phylogenetics
15. Microbiome research using molecular tools
16. Molecular microbiology in vaccine development
17. Molecular techniques in studying extremophiles
18. Molecular approaches to studying microbial symbiosis
19. Molecular microbiology in industrial applications
20. Next-generation sequencing in microbial research

### **Protocols Covered across various focussed areas under Molecular Microbiology Summer Internship**

1. DNA extraction and PCR for microbial identification
2. Molecular diagnostics for microbial infections
3. CRISPR gene editing in microbial systems
4. Antimicrobial resistance testing protocols
5. Molecular techniques for biofilm and quorum sensing studies
6. Molecular approaches to studying microbial metabolism

7. Microbial gene expression analysis workflows
8. Next-generation sequencing in microbial research protocols
9. Molecular techniques for studying microbial symbiosis
10. Microbiome analysis protocols using molecular tools

**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 Microbiology Summer Internship Fees](#)

Application Process and Other info