

## **Bacteriophage Genomics Summer Internships**

Join Bacteriophage Genomics summer internships to explore the genomic structure and function of bacteriophages, focusing on their role in bacterial control, biotechnology, and environmental applications.

## Focussed Areas under Bacteriophage Genomics Summer Internship

- 1. Bacteriophage diversity in summer environments
- 2. Phage therapy for bacterial infections
- 3. Phage-host interactions in agricultural systems
- 4. Metagenomics of bacteriophage populations
- 5. Genomic analysis of lytic and lysogenic phages
- 6. Bacteriophages in biocontrol of plant pathogens
- 7. Phage applications in water treatment
- 8. Antibiotic resistance genes in bacteriophages
- 9. Biotechnological applications of bacteriophage enzymes
- 10. CRISPR systems in bacteriophages
- 11. Phage therapy for food safety and preservation
- 12. Phage-mediated gene transfer in bacterial populations
- 13. Phage bioinformatics and genome annotation
- 14. Phage roles in environmental microbiomes
- 15. Bacteriophages in bioremediation processes
- 16. Synthetic biology using bacteriophage components
- 17. Bacteriophage applications in biotechnology
- 18. Phage-bacteria dynamics in marine environments
- 19. Genomics of bacteriophages in human health
- 20. Bacteriophage genome editing technologies

## Protocols Covered across various focussed areas under Bacteriophage Genomics Summer Internship

- 1. Bacteriophage isolation and plaque assays
- 2. Phage DNA extraction and sequencing
- 3. Bioinformatics analysis of phage genomes
- 4. CRISPR-mediated phage genome editing
- 5. Phage therapy testing in bacterial cultures
- 6. Phage-host interaction assays

- 7. Metagenomics of phage communities
- 8. Antibiotic resistance gene profiling in phages
- 9. Genome annotation of lytic phages
- 10. Phage-mediated biocontrol 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 Bacteriophage Genomics Summer Internship Fees

Application Process and Other info