

## **Archaea Microbiology Winter Internships**

Participate in Archaea Microbiology winter internships to explore cold-adapted archaea in icy and polar environments, focusing on their roles in carbon cycling and industrial applications.

## Focussed Areas under Archaea Microbiology Winter Internship

- 1. Cold-adapted archaea in polar regions
- 2. Methanogenic archaea in frozen environments
- 3. Archaea in permafrost and ice-covered ecosystems
- 4. Psychrophilic archaea and biotechnology applications
- 5. Carbon cycling by archaea in cold environments
- 6. Archaea in icy aquatic systems
- 7. Industrial applications of cold-adapted archaea
- 8. Archaea in cold bioremediation processes
- 9. Metagenomics of psychrophilic archaeal communities
- 10. Functional genomics of cold-adapted archaea
- 11. Sulfur-metabolizing archaea in cold ecosystems
- 12. Biogeochemical roles of archaea in polar regions
- 13. Lipid biosynthesis in cold-adapted archaea
- 14. Archaeal adaptations to freezing temperatures
- 15. Methanogenesis in cold environments
- 16. Archaea in cryogenic bioreactors
- 17. Environmental monitoring using cold-adapted archaea
- 18. Biotechnology applications of psychrophilic extremozymes
- 19. Archaeal lipid membrane analysis in cold conditions
- 20. Molecular adaptations of cold-tolerant archaea

## Protocols Covered across various focussed areas under Archaea Microbiology Winter Internship

- 1. Sampling and culturing of cold-adapted archaea
- 2. DNA extraction from cold-environment archaea
- 3. Metagenomic analysis of cold-tolerant archaeal populations
- 4. Methanogenesis assays in cold conditions
- 5. Lipid analysis from cold-adapted archaeal cell membranes
- 6. Enzyme activity assays from psychrophilic archaea
- 7. Carbon cycling studies using cold-adapted archaea

- 8. Cryogenic bioreactor operation with archaea
- 9. Bioremediation protocols using cold-tolerant archaea
- 10. Protein extraction and analysis from cold-adapted archaea

## 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 Archaea Microbiology Winter Internship Fees

Application Process and Other info