

## **Synthetic Genomics Summer Internships**

Join Synthetic Genomics summer internships to explore the field of creating artificial genomes, focusing on gene synthesis, genome editing, and their applications in developing synthetic organisms for biotechnology, agriculture, and medical research.

### **Focussed Areas under Synthetic Genomics Summer Internship**

1. Design and synthesis of artificial genomes
2. Genome editing technologies in synthetic genomics
3. Applications of synthetic genomics in biotechnology
4. Synthetic organisms for bioproduction and biofuels
5. CRISPR and other gene editing tools in synthetic genomics
6. Synthetic genomics for improving agricultural traits
7. Genome-scale engineering for metabolic pathway optimization
8. Applications in synthetic biology and organism design
9. Synthetic genomes for disease modeling and drug development
10. Biotechnology applications of synthetic microorganisms
11. Synthetic genomics for creating novel biomaterials
12. High-throughput gene synthesis techniques
13. Computational tools for synthetic genome design
14. Ethical and regulatory issues in synthetic genomics
15. Synthetic genomics in vaccine development
16. Applications in environmental and industrial biotechnology
17. Synthetic genomes for personalized medicine
18. Synthetic genomics in regenerative medicine and tissue engineering
19. Gene circuits and regulatory networks in synthetic genomics
20. Applications of synthetic genomics in synthetic biology research

### **Protocols Covered across various focussed areas under Synthetic Genomics Summer Internship**

1. Protocols for designing and synthesizing artificial genomes
2. CRISPR workflows for synthetic genome editing
3. High-throughput gene synthesis protocols
4. Protocols for metabolic engineering using synthetic genomes
5. Techniques for developing synthetic microorganisms
6. Protocols for synthetic genomics in bioproduction

7. Genome-scale engineering workflows
8. Synthetic genomics for disease modeling and drug development
9. Protocols for using synthetic genomes in vaccine development
10. Techniques for applying synthetic genomics in agriculture

**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 Synthetic Genomics Summer Internship Fees](#)

Application Process and Other info