

## **Recombinant DNA Technology Internship**

# **Advanced Focussed Areas for Interns in Recombinant DNA Technology Internships**

Back to All Internships Recombinant DNA Technology Internship Fee Details

### • Fundamentals of Recombinant DNA Technology

- Introduction to Genetic Engineering and Cloning
- Basic Concepts of DNA, Genes, and Genomes
- Tools and Techniques in Molecular Cloning
- Applications of Recombinant DNA Technology in Research
- Ethics and Safety in Genetic Engineering
- Future Directions in Recombinant DNA Technology

#### • Gene Cloning and Expression

- Cloning Vectors and Host Systems
- Transformation and Selection of Recombinant Clones
- Expression Systems for Protein Production
- Case Studies in Gene Cloning
- Future Trends in Genetic Engineering
- Challenges in Cloning and Expression
- Regulatory Aspects of Genetic Modification
- Impact of Recombinant DNA Technology on Biotechnology
- Public Engagement and Education in Genetic Engineering
- Integration of Recombinant DNA Technology with Synthetic Biology

#### • Applications in Medicine and Industry

- Production of Therapeutic Proteins and Vaccines
- o Genetic Engineering in Agriculture
- Case Studies in Medical and Industrial Applications
- Future Directions in Biotechnological Applications
- Challenges in Scaling Up Production
- Regulatory Aspects of Biomedical Engineering
- Impact of Recombinant DNA Technology on Medicine
- Public Engagement and Education in Biotechnology
- Ethical Considerations in Genetic Engineering
- Integration of Recombinant DNA Technology with Biomedical Research

#### • Techniques and Technologies in Genetic Engineering

- o CRISPR-Cas9 and Genome Editing
- Site-Directed Mutagenesis and Gene Silencing

- Case Studies in Advanced Genetic Techniques
- Future Directions in Genetic Technologies
- Challenges in Gene Editing and Manipulation
- Regulatory Aspects of Advanced Genetic Techniques
- Impact of CRISPR and Gene Editing on Research
- Public Engagement and Education in Gene Editing
- o Integration of Advanced Techniques with Genetic Engineering
- Future Research Priorities in Recombinant DNA Technology

#### • Future Directions and Emerging Trends

- o Innovations in Recombinant DNA Technology and Genetic Engineering
- Role of Recombinant DNA Technology in Precision Medicine
- o Emerging Applications in Biomedical and Agricultural Research
- o Global Trends in Recombinant DNA Technology Research
- o Future of Genetic Engineering in Healthcare and Industry
- Ethics and Regulation in Genetic Engineering Research
- Future Research Priorities in Genetic Engineering
- Impact of Genetic Engineering on Society
- Public Engagement and Education in Genetic Sciences
- o Integration of Recombinant DNA Technology with AI and Data Science

## Contact Via Whatsapp on +91-7993084748 for Fee Details