

# Research Gap Identification in Biotechnology

## Genetic Engineering and Modification

- 1.1. Ethical Implications of Gene Editing in Humans
- 1.2. Long-term Effects of Genetically Modified Organisms (GMOs)
- 1.3. Enhancing CRISPR-Cas9 Precision and Off-target Effects

## Biopharmaceuticals

- 2.1. Personalized Medicine Approaches in Drug Development
- 2.2. Development of Novel Drug Delivery Systems for Biologics
- 2.3. Immunogenicity and Allergic Reactions to Biopharmaceuticals

## Bioinformatics and Computational Biology

- 3.1. Advancements in Predictive Genomic Analysis
- 3.2. Big Data Analytics for Biological Data Interpretation
- 3.3. Privacy and Security Concerns in Genomic Data Sharing

## Synthetic Biology

- 4.1. Standardization of Biological Parts and Devices
- 4.2. Creating Artificial Life: Ethical and Moral Implications
- 4.3. Environmental Impact Assessment of Synthetic Microorganisms

## Bioprocessing and Biomanufacturing

- 5.1. Scalability Challenges in Bioproduction
- 5.2. Continuous Bioprocessing vs. Batch Processing: Optimization
- 5.3. Sustainability and Green Techniques in Biomanufacturing

## Bioenergy and Environmental Biotechnology

- 6.1. Enhancing Microbial Fuel Cell Efficiency

6.2. Biomass Conversion Technologies: Cost-effectiveness

6.3. Bioremediation Strategies for Emerging Pollutants

## **Medical Biotechnology**

7.1. Stem Cell Therapy: Standardization and Safety

7.2. CRISPR-based Therapeutics: Delivery Challenges

7.3. Biotechnology Interventions in Cancer Immunotherapy

## **Plant Biotechnology**

8.1. Drought and Salinity Tolerance in Genetically Modified Crops

8.2. Crop Disease Resistance: Sustainable Approaches

8.3. Impact of GM Crops on Biodiversity and Ecosystems

## **Industrial Biotechnology**

9.1. Enzyme Engineering for Industrial Applications

9.2. Bioplastics: Enhancing Production and Biodegradability

9.3. Microbial Biofactories for Chemical Production

## **Ethical, Legal, and Social Implications (ELSI) of Biotechnology**

10.1. Ensuring Equitable Access to Biotechnological Advancements

10.2. Regulatory Frameworks for Gene-edited Organisms

10.3. Public Perception and Understanding of Biotechnological Innovations

## **Fee Structure**

Note 1: Fee mentioned below is according to the selected duration

Note 2: Fee of any sort is NON REFUNDABLE once paid. Please cross confirm all the details before proceeding to fee payment.

Note 3: Fee is including all taxes.

**Research Gap Identification in Biotechnology Total Fee: Rs 120000/-**

**Reg Fee Rs 36000/-**

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**Please contact +91-9014935156 for fee payments info or EMI options or  
Payment via Credit Card or Payment using PDC (Post Dated Cheque).**