



Applied Microbiology Research Outsourcing Services

Our applied microbiology outsourcing services support R&D in industrial, environmental, agricultural, food, and clinical microbiology — from microbe isolation to scale-up and process validation.

Our Applied Microbiology Research Capabilities

With advanced culturing labs, fermentation units, and molecular tools, we handle diverse microbiological experiments to deliver reproducible, high-quality results for your applications.

Types of Applied Microbiology Research We Handle

- Microbial Isolation and Screening
- Strain Improvement and Mutagenesis
- Antimicrobial Activity Assays
- Probiotic Characterization
- Enzyme-Producing Microbe Studies
- Industrial Fermentation Optimization
- Biofertilizer and Biopesticide Microbes
- Bioremediation Potential Evaluation
- Bioleaching and Biomining Microbiology
- Wastewater Microbial Treatment
- Biodegradation of Pollutants
- Food Spoilage and Preservation Microbiology
- Food and Beverage Quality Control
- Dairy Microbiology Research
- Soil and Rhizosphere Microbiology
- Pathogen Detection and Identification
- Antibiotic Sensitivity Testing
- Biofilm Formation and Control Studies
- Microbial Consortia Studies
- Environmental Microbial Monitoring
- Water Microbiology and Safety Testing
- Indoor Air Quality Microbial Analysis
- Clinical Isolate Characterization
- Resistance Mechanism Studies

- Microbial Genomics and Metagenomics
- Metabolic Pathway Elucidation
- Fermentation Byproduct Profiling
- Scale-Up Feasibility Studies
- Microbial Product Quality Testing
- Custom Microbiological Protocol Development

Key Research Outsourcing Services Offered

- Sample Collection and Microbe Isolation
- Pure Culture Maintenance and Preservation
- Selective Media Design and Cultivation
- Strain Improvement and Mutagenesis
- Antibioassay and MIC Testing
- Biofilm Assay Setup and Disruption Studies
- Probiotic Strain Viability Testing
- Enzyme Activity Quantification
- Batch and Fed-Batch Fermentation Trials
- Fermentation Process Optimization
- Bioreactor Operation and Monitoring
- Downstream Processing and Purification
- Pathogen Detection using PCR and Culture
- Antibiotic Resistance Gene Analysis
- Metagenomic DNA Extraction and Sequencing
- Microbial Diversity and Taxonomy Reports
- Water and Food Safety Testing Panels
- Air Microbiology Sampling and Analysis
- Custom Microbial Consortia Development
- Biodegradation Assay Development
- Environmental Monitoring and Reporting
- Regulatory Compliance Documentation
- Detailed Technical Reports and SOPs
- Confidential Data Handling with NDA
- Secure Cloud Data Storage and Sharing
- Progress Reports and Project Milestones
- Publication-Ready Data and Figures
- Post-Project Consulting and Tech Support
- Data Archival and Long-Term Backup
- Custom Protocol and Method Development

Why Choose Us for Applied Microbiology Research Outsourcing?

Our trained microbiologists, validated SOPs, and advanced labs guarantee robust, reproducible data, supporting your product development and process validation goals efficiently.

Industries & Sectors We Serve

- Biotechnology and Bioprocess Firms
- Food and Beverage Companies
- Agricultural Input Producers
- Environmental and Waste Management Agencies
- Clinical Diagnostics Labs
- Academic and Government Research Institutes

Customized Applied Microbiology Solutions

We design custom culturing protocols, scale-up fermentation trials, and microbial testing workflows to match your specific application and regulatory standards.

Quality Assurance & Regulatory Compliance

Our services follow ISO and GLP guidelines, with complete QA/QC, validated methods, and detailed documentation ready for regulatory audits or product submissions.

Case Studies & Client Success Stories

Explore how our applied microbiology expertise has helped clients develop novel bioactives, improve process yields, and ensure product safety globally. Request examples on demand.

How It Works: Our Research Outsourcing Process

1. **Requirement Definition:** Discuss scope, target organisms, and goals.
2. **Proposal & Quotation:** Share a detailed plan, timelines, and transparent costing.
3. **Lab Execution:** Perform experiments, process monitoring, and data recording.
4. **Data Analysis & Reporting:** Deliver validated results, interpretations, and recommendations.
5. **Post-Project Support:** Assist with follow-up trials, tech transfer, and publications.

Frequently Asked Questions (FAQs)

Q: Do you handle pathogenic organisms?

A: Yes, we follow biosafety level protocols for safe handling and disposal.

Q: Can you support pilot-scale fermentation?

A: Absolutely — we offer bench to pilot-scale process development services.

Q: How secure is my project data?

A: NDAs are standard; data is encrypted and securely stored with restricted access.

Get Started / Request a Quote

Contact us today to discuss your applied microbiology research and receive a custom plan and quote tailored to your goals.

Contact Us

Email: research-outsourcing@nthrys.com

Phone: +91-8977624748