



## Applied Genomics Research Outsourcing Services

Our applied genomics outsourcing services bridge the gap between genomic data and real-world applications in agriculture, healthcare, bioindustry, and environmental solutions, supporting innovation with robust data and analysis.

### Our Applied Genomics Research Capabilities

With cutting-edge sequencing, bioinformatics, and functional validation labs, we translate genome-scale data into actionable insights for improving crops, livestock, disease management, and bioresource sustainability.

### Types of Applied Genomics Research We Handle

- Trait Discovery and Marker Development
- Marker-Assisted Selection Studies
- Genomic Selection for Breeding
- QTL Mapping and Validation
- Whole Genome Resequencing
- Transcriptome Profiling
- Epigenetic Modification Studies
- Microbial Genome Applications
- Pathogen Diagnostics and Genotyping
- Metagenomics of Soil and Water
- Microbiome Applications in Health
- Bioremediation Genomics
- Bioenergy Crop Genomics
- Functional Gene Annotation
- Non-Coding RNA Analysis
- Gene Expression Under Stress
- Plant Disease Resistance Genes
- Animal Disease Genomics
- Personalized Medicine Applications
- Pharmacogenomics Validation
- CRISPR Target Identification
- Genome Editing Efficiency Studies
- Gene Fusion and Mutation Analysis

- Population Genomics Studies
- Comparative Genomics for Trait Mining
- Bioinformatics Tool Development
- Custom Database Creation
- NGS Data Quality Control Pipelines
- Variant Detection and Annotation
- Gene Network Analysis

## **Key Research Outsourcing Services Offered**

- DNA/RNA Extraction and QC
- Whole Genome and Exome Sequencing
- Targeted Gene Panel Sequencing
- Genotyping by Sequencing (GBS)
- SNP and Indel Calling Pipelines
- QTL and GWAS Analysis
- Transcriptome Assembly and Analysis
- Epigenetic Data Profiling
- Microbiome Diversity Assessment
- Metagenome Assembly and Annotation
- Functional Annotation of Genes
- Pathogen Genome Sequencing
- Phylogenetic Analysis and Tree Building
- Variant Effect Prediction
- CRISPR Guide RNA Design
- Gene Editing Efficiency Testing
- Regulatory Element Identification
- Data Visualization and Network Mapping
- Custom Bioinformatics Pipeline Setup
- Data Storage and Cloud Sharing Solutions
- Manuscript Drafting and Figures
- Progress Updates and Reporting
- Compliance and Regulatory Documentation
- Confidential Data Handling with NDA
- Raw Data Archival and Delivery
- Technical Support and Troubleshooting
- Publication-Ready Data Packages
- Custom Database Integration
- Post-Project Consulting
- Follow-Up Data Analysis Requests

## **Why Choose Us for Applied Genomics Research**

## Outsourcing?

Our cross-domain expertise, high-throughput pipelines, and data security guarantee reproducible, practical genomic solutions ready for immediate field or clinical translation.

## Industries & Sectors We Serve

- Agricultural Breeding Companies
- Biotechnology and Bioenergy Firms
- Healthcare and Personalized Medicine Startups
- Microbiome Research Organizations
- Environmental and Bioremediation Agencies
- Academic and Government Research Institutes

## Customized Applied Genomics Solutions

We tailor genomic workflows to your species, trait, or condition, delivering flexible project designs, validated data, and ready-to-deploy insights under strict IP and privacy standards.

## Quality Assurance & Regulatory Compliance

Our operations comply with ISO and GLP guidelines, ensuring robust QA/QC, detailed reporting, and ready-to-submit regulatory documents for grants or patents.

## Case Studies & Client Success Stories

Explore how our applied genomics support has accelerated breeding, bioenergy crop development, and precision health applications worldwide. Request sample cases on demand.

## How It Works: Our Research Outsourcing Process

1. **Requirement Assessment:** Define species, traits, and project scope.
2. **Proposal & Quotation:** Share detailed plan, deliverables, and transparent costing.
3. **Data Generation & Analysis:** Execute sequencing, assembly, and downstream analysis.
4. **Result Reporting:** Deliver comprehensive results with clear interpretation.
5. **Post-Project Support:** Provide additional analysis or publication support as needed.

## Frequently Asked Questions (FAQs)

**Q:** Do you accept custom gene targets?

**A:** Yes, we design panels or pipelines tailored to your specific gene or pathway targets.

**Q:** How secure is project data?

**A:** We guarantee confidentiality with NDAs and secure cloud storage options.

**Q:** Can you help with grant or patent preparation?

**A:** Absolutely — we provide supporting data, formatted figures, and validation reports.

## **Get Started / Request a Quote**

Contact us today to discuss your applied genomics needs and receive a detailed plan and cost estimate tailored to your goals.

## **Contact Us**

Email: [research-outsourcing@nthrys.com](mailto:research-outsourcing@nthrys.com)

Phone: +91-8977624748