



## Molecular Phylogenetics Research Outsourcing Services

Our molecular phylogenetics research outsourcing services reconstruct evolutionary histories, estimate divergence times, and resolve species relationships using advanced molecular data and bioinformatics pipelines.

### Our Molecular Phylogenetics Research Capabilities

Our evolutionary biologists and bioinformaticians apply gene sequencing, alignment, and tree-building methods to interpret genetic variation and evolutionary lineage splits.

### Types of Molecular Phylogenetics Research We Handle

- Evolutionary Gene Sequence Analysis
- DNA Barcoding for Species Identification
- Phylogenetic Tree Construction
- Bayesian and Maximum Likelihood Trees
- Molecular Clock Estimation
- Species Divergence Time Calculation
- Population Genetics and Phylogeography
- Gene Family Evolution Studies
- Horizontal Gene Transfer Detection
- Viral and Bacterial Phylogenetics
- Ancient DNA Phylogenetic Placement
- Comparative Genomics in Phylogenetics
- Protein Evolution and Phylogeny
- Phylogenetic Inference Using SNP Data
- Marker Selection for Phylogenetic Analysis
- Whole Genome Phylogenetics
- Multigene Concatenated Phylogeny
- Phylogenetic Network Analysis
- Species Complex Resolution
- Hybridization and Introgression Studies
- Coalescent-Based Phylogenetics
- Host-Parasite Co-Phylogeny
- Microbial Community Phylogenetics
- Phylogenetic Diversity Metrics

- Biogeography and Lineage Dispersal
- Phylogenetic Comparative Methods
- Regulatory-Compliant Phylogenetics Reports
- Publication-Ready Phylogenetics Data
- Cross-Lab Collaborative Phylogenetics Projects
- Custom Molecular Phylogenetics Projects

## **Key Research Outsourcing Services Offered**

- Sample DNA Extraction and QC
- Gene Sequencing for Phylogenetic Markers
- Sequence Alignment and Quality Check
- Tree Building Using Various Algorithms
- Molecular Clock Model Calibration
- Divergence Time Estimation
- Bayesian Inference and Bootstrapping
- Marker Development for Phylogenetics
- Horizontal Gene Transfer Analysis
- Population Structure Integration
- Phylogeographic Mapping
- Protein Evolution Pathway Analysis
- Comparative Genomics Integration
- Coalescent Modelling
- Phylogenetic Network Generation
- Microbial Phylogenetic Analysis
- Host-Parasite Coevolution Studies
- Biogeographic History Reconstruction
- Data Visualization and Interpretation
- Regulatory-Compliant Documentation
- Confidential Data Handling and NDA
- Interim Reports and Stakeholder Updates
- Publication-Ready Figures and Manuscripts
- Stakeholder Presentation Support
- Workshops and Training in Phylogenetics
- Post-Project Technical Consulting
- IP and Patent Filing Support
- Grant Proposal and Manuscript Assistance
- Sample Archiving and Secure Backup
- Compliance with GLP, GCP, ISO Standards

## **Why Choose Us for Molecular Phylogenetics Research Outsourcing?**

Our experts deliver robust evolutionary hypotheses, divergence time estimates, and high-quality trees to support species classification, conservation, and evolutionary biology research.

## Industries & Sectors We Serve

- Evolutionary Biology Research Institutes
- Taxonomy and Biodiversity Centers
- Academic Genetics and Genomics Departments
- Bioinformatics and Phylogenomics Labs
- Environmental and Conservation Agencies
- Regulatory Wildlife and Agriculture Units

## Customized Molecular Phylogenetics Solutions

We design gene marker panels, build robust trees, and integrate population genetics for precise evolutionary inference and lineage tracking.

## Quality Assurance & Regulatory Compliance

Our workflows comply with GLP, GCP, ISO, and international phylogenetic research standards, ensuring validated, reproducible, and audit-ready outputs.

## Case Studies & Client Success Stories

Discover how our outsourcing has resolved species complexes, clarified evolutionary relationships, and supported conservation planning. References available on request.

## How It Works: Our Research Outsourcing Process

1. **Requirement Gathering:** Define target species, markers, and evolutionary questions.
2. **Proposal & Quotation:** Provide a clear plan, timeline, and cost estimate.
3. **Lab Execution:** Perform sequencing, alignment, and tree construction.
4. **Data Reporting:** Deliver high-confidence trees and compliance-ready reports.
5. **Post-Project Support:** Offer publication support, visualization, and data sharing assistance.

## Frequently Asked Questions (FAQs)

**Q:** Can you estimate divergence times?

**A:** Yes — we apply molecular clock models and calibrate them with fossil or geological data.

**Q:** Do you handle microbial and viral phylogenetics?

**A:** Absolutely — we analyze genes, genomes, and SNPs for microbial and viral lineages.

**Q:** How secure is my phylogenetic data?

**A:** Strict NDAs, encrypted storage, and compliance with research ethics ensure data protection.

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

Contact us today to discuss your molecular phylogenetics project and receive a customized plan, timeline, and cost estimate aligned with your evolutionary study goals.

## **Contact Us**

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

Phone: +91-8977624748