

End-to-End Microbiome Analysis via Next Generation Sequencing

The CosmosID Advantage – Innovation at Every Step of the Workflow



CosmosID's Next-Generation Sequencing facilities in USA and Sweden offer superior workflows for over 20 different sample types and various study applications so you can generate high-quality data for your study. From sample collection advice and kits to optimized DNA extractions, library preparation, cost-effective sequencing and microbiome-specific data QC, you can be confident in your bioinformatic analysis.

Infrastructure

- Study Design & Sample Collection Support
- Sample-Specific SOP's for Minimal Bias
- CLIA Certified, GxP Compliant
- Experience in 20+ Sample Types
- Expedited Services Available
- Real-Time Project Updates

Service

- Shotgun Metagenomics
- Shotgun Metatranscriptomics
- Bacterial Isolate Whole Genome Sequencing
- Amplicon Sequencing (16S & ITS)
- 16S qPCR & SARS-CoV-2 RT-PCR

Technology

- Illumina NovaSeq6000
- Illumina NextSeq2000
- Illumina MiSeq
- Oxford Nanopore

Experience in all markets:



Pharma

- Exploratory & Primary/Secondary Microbiome Endpoints
- Pre-Clinical & Clinical Study Support
- Biomarker Discovery
- Antimicrobial Resistance
- Live Biotherapeutic Strain Discovery & Development
- CMC Applications



Nutrition

- Gut-Axis Research
- Nutrition/Nutraceutical/Ingredient Studies
- Probiotic Strain Discovery
- Pre- and Probiotic Studies
- Direct-to-Consumer Testing Support
- Infant Health & HMO Studies



Cosmetics & Personal Care

- Skin Microbiome Research
- Oral Microbiome Research
- Product Testing



Clinical

- Field Trials & Clinical Studies
- Poultry Surveillance & Disease Prevention
- Livestock Gut Health & Disease Prevention
- Companion Animal Health & Nutrition Studies
- Direct-To-Pet/Vet Testing Support



Agriculture

- Food Safety & Spoilage Studies
- Water Safety & Surveillance
- Environmental Testing
- AMR Surveillance
- Epidemiology & Outbreak Investigation
- Pharmaceutical QC & Microbiology



Academia

- Human Observational Studies
- Microbiome Research
- Clinical Microbiology Research
- Bacteriology Research
- Publication Support
- In Vivo & In Vitro Studies



Sample Preparation

- Optimized DNA/RNA Extractions Based on Sample Type
- Expertise in Low Biomass Sample Types
- Risk Assessment via Nucleic Acid & Library QC
- Experience in 20+ Sample Types (Human & Non-Human)

Bioinformatic Analysis

- Curated Databases & Machine Learning Filters for Leading Sensitivity & Precision
- Multi-Kingdom, Strain-Level Resolution
- Metagenomic Assembly & MAG Generation
- Pipelines for Shotgun Metagenomics, Metatranscriptomics, 16S & ITS
- Multi-Omics & Predictive Analytics



Study Design & Sample Collection

- Sample Collection & Logistics Considerations
- DNA/RNA Quantity & Quality Requirements
- Method & Workflow Selection
- Sequencing Depth Consultation & Cost Optimization
- Analysis & Statistical Planning

Next-Generation Sequencing

- Illumina & ONT Sequencing
- Shotgun Metagenomics & Metatranscriptomics
- Isolate Whole Genome Sequencing
- Amplicon Sequencing
- qPCR Solutions

Interpretation & Reporting

- CosmosID-HUB: Dynamic Charts, Visualizations & Comparative Analysis Software
- Custom Bioinformatics Services
- Consultation & Interpretation
- Publication Support
- Reporting Services

Have a project in mind?
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