



# NGS Bioinformatics

## From Sequence Reads to Achievements

We are a trusted partner for global academic and commercial research institutions, specializing in next-generation sequencing and complex data analysis. Our bioinformatics pipeline ensures accurate results, presented in a user-friendly format.

Our GXP Bioinformatics Suite helps to navigate and compare data globally, delivered in common formats via secure FTP or hard drive.



### Machine Learning/AI

Identifying key factors utilizing advanced machine learning and artificial intelligence, we analyze vast genomic datasets for precision medicine, identifying crucial genes, mutations or epigenetic changes.



### Clinical Research

Our high-resolution mRNA, smallRNA, epigenetic and microbiome data in combination with advanced bioinformatics are integral for clinical research, aiding in understanding disease mechanisms, identifying biomarkers, and developing targeted therapies.

Our expertise and the reliability of our techniques and services are documented in hundreds of peer-reviewed publications and collaborations with research institutions world-wide.

## DNA (Exomes, Panels, Genomes)



- Variant calling and annotation
- Copy Number Variations (CNVs)
- Epigenetic data
- ChIP Seq data
- ATAC-Seq data

## RNA



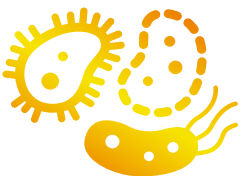
- Variant calling and annotation
- Gene expression data
- Gene fusions
- Small RNAs/ miRNAs
- GO enrichment, GSEA, pathways

## Breeding & Non Models



- De novo assembly incl. PacBio / Oxford Nanopore and short reads
- De novo annotation with genetic and proteomic data integration
- Genotyping by Sequencing (GBS) pipeline
- QTL Analysis

## Microbiome



- 16s RNA based
- Metagenomics based / shotgun sequencing
- Metatranscriptomics
- De novo assembly and annotation

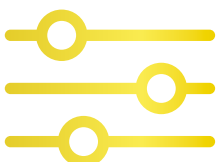
## Clinically Relevant Data



- Variant calling and annotation
- Copy Number Variations (CNVs)
- Actionable mutations
- Malignant pathways
- Therapeutic options

(Research Use Only)

## Customized Solutions



- Your data
- Your requirements
- (Y)our individual solution