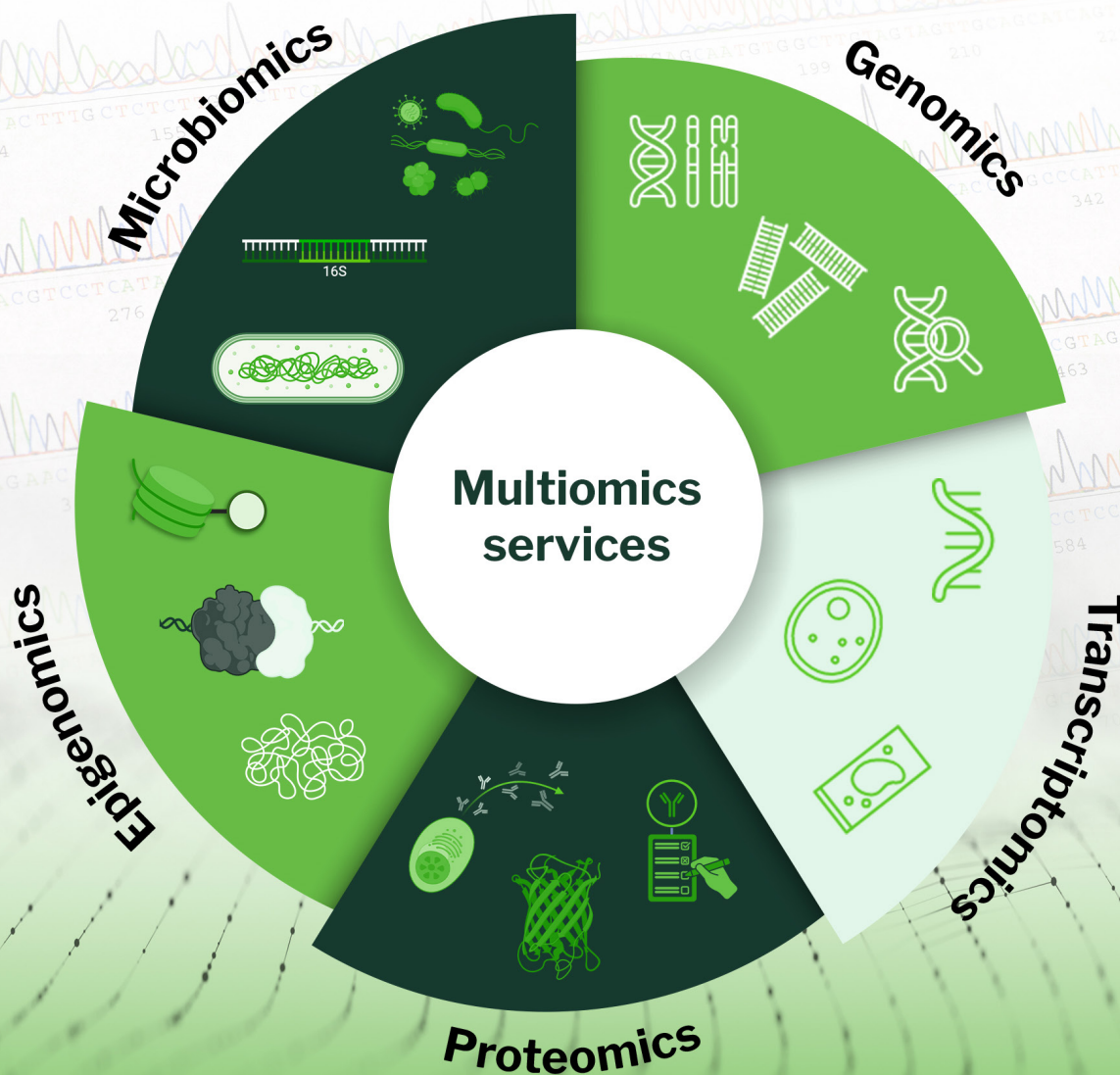


# Unlocking biological insights with **Signios Bio's** advanced multiomics solutions



## More omics for more discovery

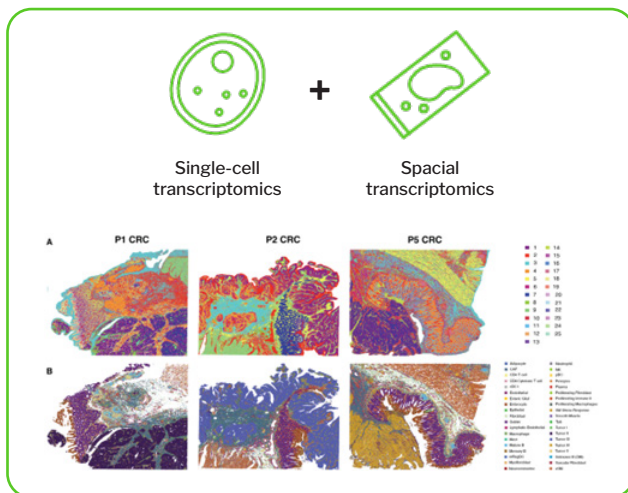
Signios Bio offers specialized multiomics solutions designed to unravel the complexities of oncology, immunology, neurology, and rare & infectious diseases. By integrating multiple modalities with our advanced bioinformatics tools and pipelines, we provide customized solutions tailored to your unique research needs.



### Oncology solutions - Targeting tumor evolution

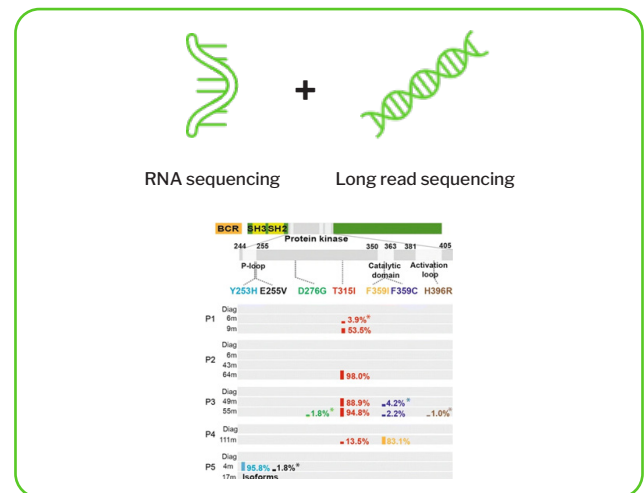
#### TME signal

The TME Signal solution identifies distinct cell populations and gene regulatory networks driving tumor evolution via transcriptomics at single-cell and spatial resolution to uncover the intricate interactions within the tumor microenvironment.



#### Multi-level RNA signal

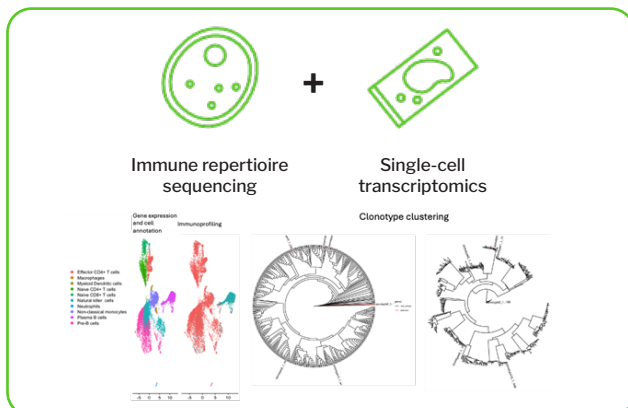
The Multi-level RNA Signal solution detects full-length RNA isoforms and resolves structural variants via long read RNA sequencing to gain a comprehensive understanding of gene expression dynamics in cancer.



### Immunology solutions - Decoding immune responses

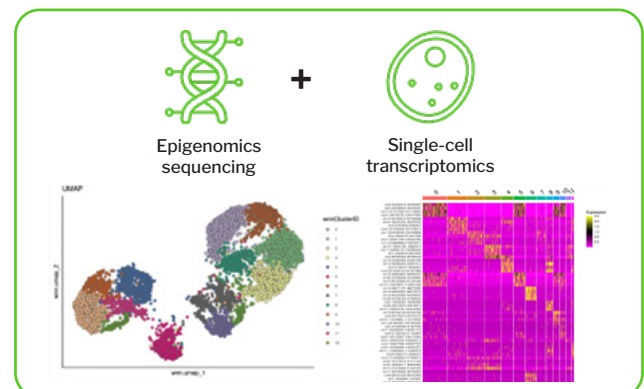
#### TCR/BCR profile signal

The TCR/BCR profile Signal solution investigates clonal expansion of antigen-specific T and B cells via transcriptomics at single-cell resolution to track immune cell lineages and responses with precision.



#### Immunogenomic signal

The Immunogenomic Signal solution maps chromatin accessibility changes and epigenetic features of memory immune cells at single-cell resolution to understand the regulatory mechanisms shaping immune memory.

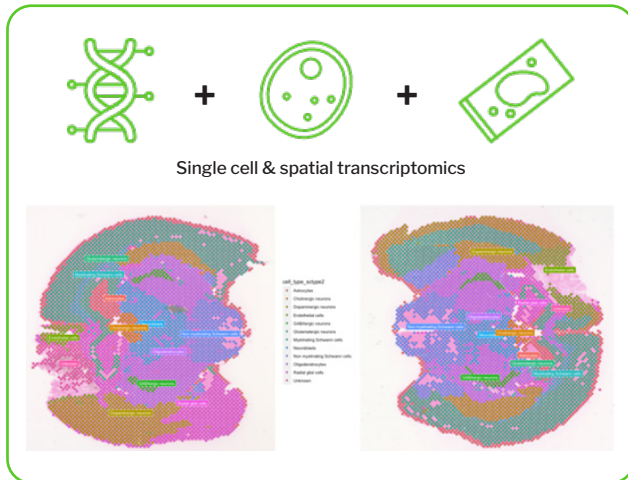




## Neurology solutions - Mapping brain complexity

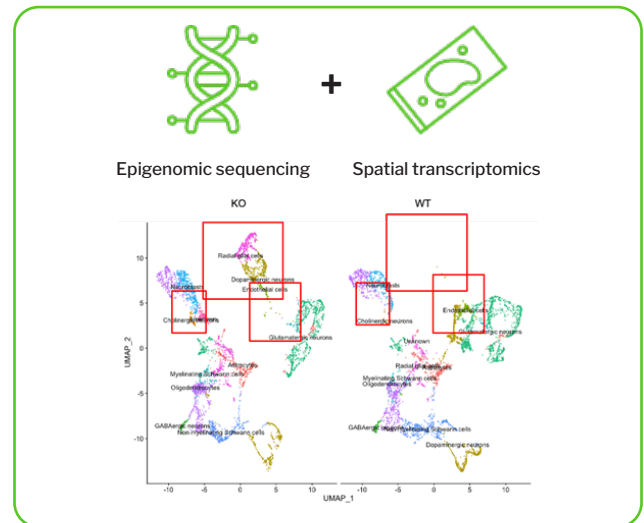
### Neuroregulation signal

The Neuroregulation Signal solution detects changes in methylation, chromatin structure, and identifies vulnerable neuronal populations using transcriptomics & epigenomics at single-cell and spatial resolution to explore the epigenetic underpinnings of neurological disorders.



### Neuroimmune signal

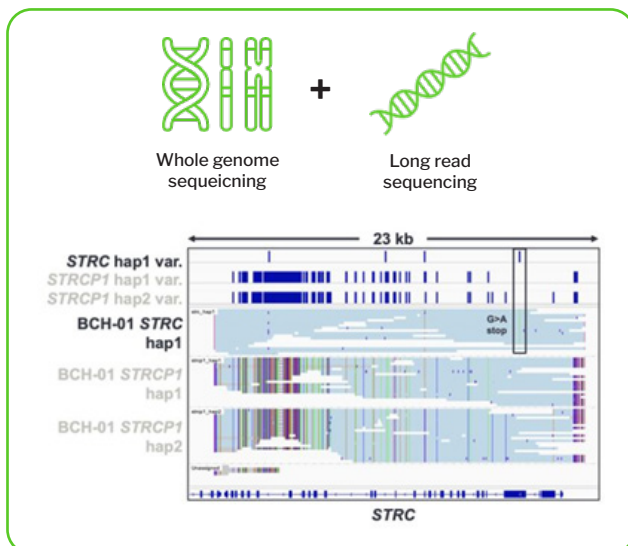
The Neuroimmune Signal solution establishes disease-associated neural cell populations and maps immune cell infiltration in the brain via spatial transcriptomics & epigenomics to decipher the interplay between the immune system and the brain.



## Rare & infectious disease solutions - Precision insights

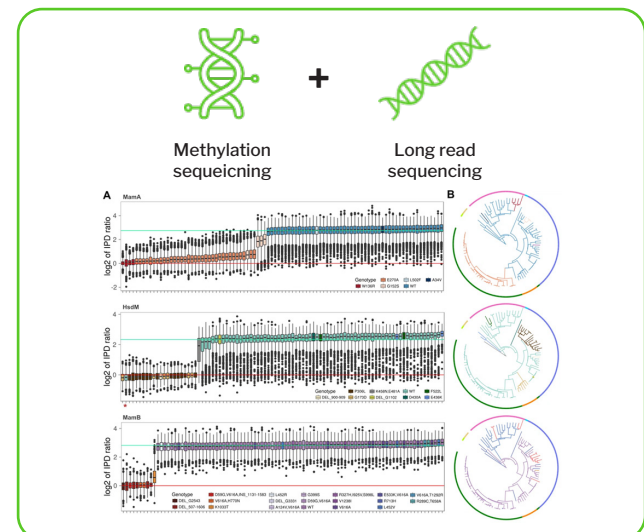
### Precision DNA signal

The Precision DNA Signal solution catalogs genomic rearrangements, assembles uncharacterized regions, and classifies cellular targets via long read DNA sequencing to identify novel therapeutic targets and disease mechanisms.



### Pathogen signal

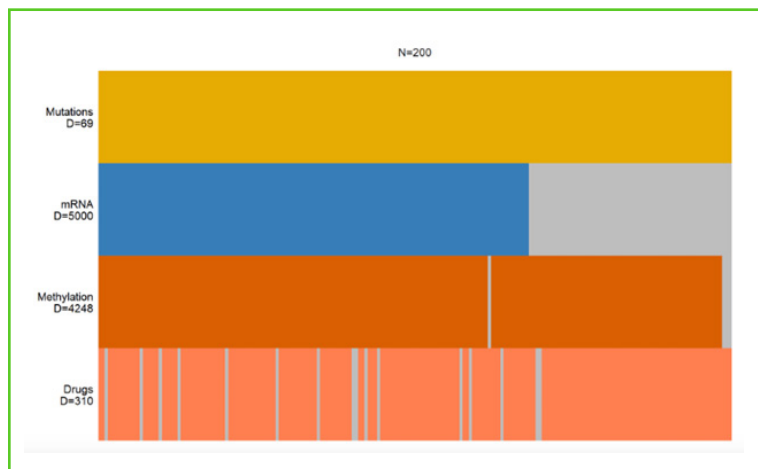
The Pathogen Signal solution determines resistance genes, resolves complex genomes, and detects bacterial epigenetic regulation via long read DNA and methylation profiling to combat infectious diseases with a deeper understanding of pathogen biology.



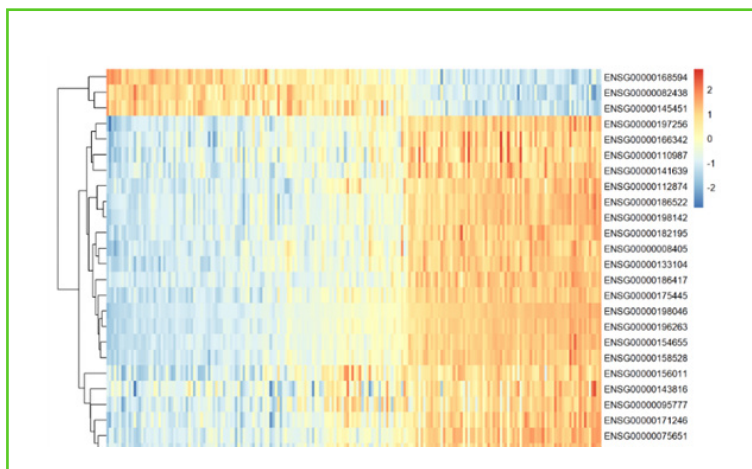


## Multiome signal

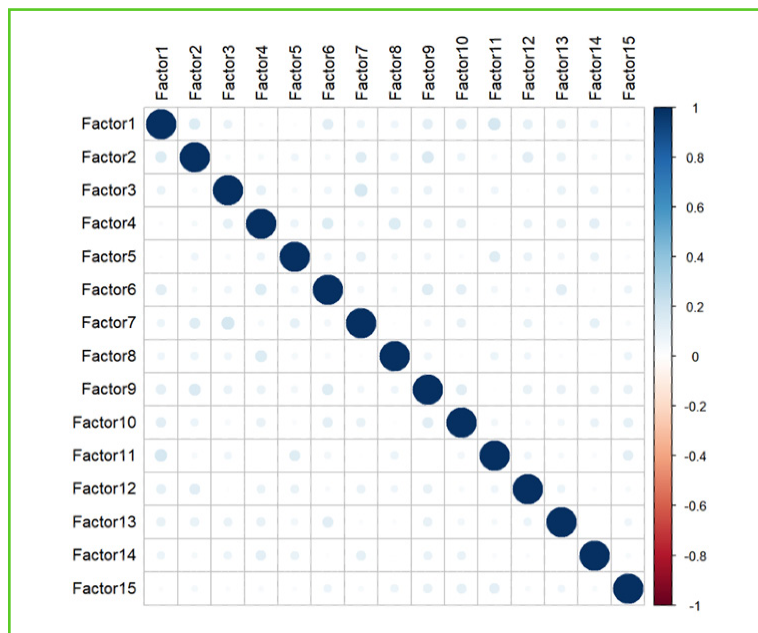
Our true multiomics pipeline, Multiome Signal, overcomes the limitations of traditional analytics by seamlessly integrating data from multiple assays, delivering unbiased, unsupervised insights. This approach applies across fields, from drug discovery, where treatment response data can be analyzed alongside gene expression and patient outcomes, to cancer research, enabling detailed exploration of cancer subtypes and cell states for a more precise understanding of disease biology.



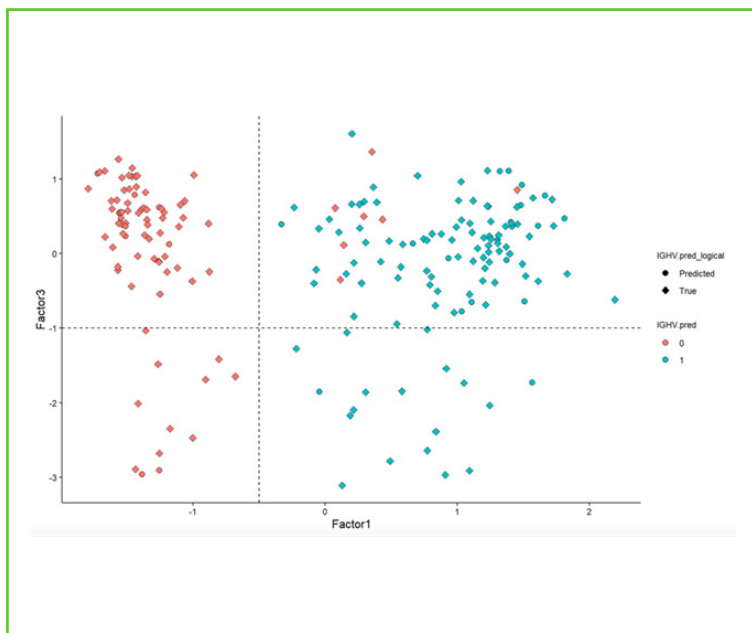
Plot showing datasets (rows), groups (columns), their corresponding dimensionalities (features), and how much missing information they have (grey bars).



Plot showing heatmap for top 25 features for factor 1



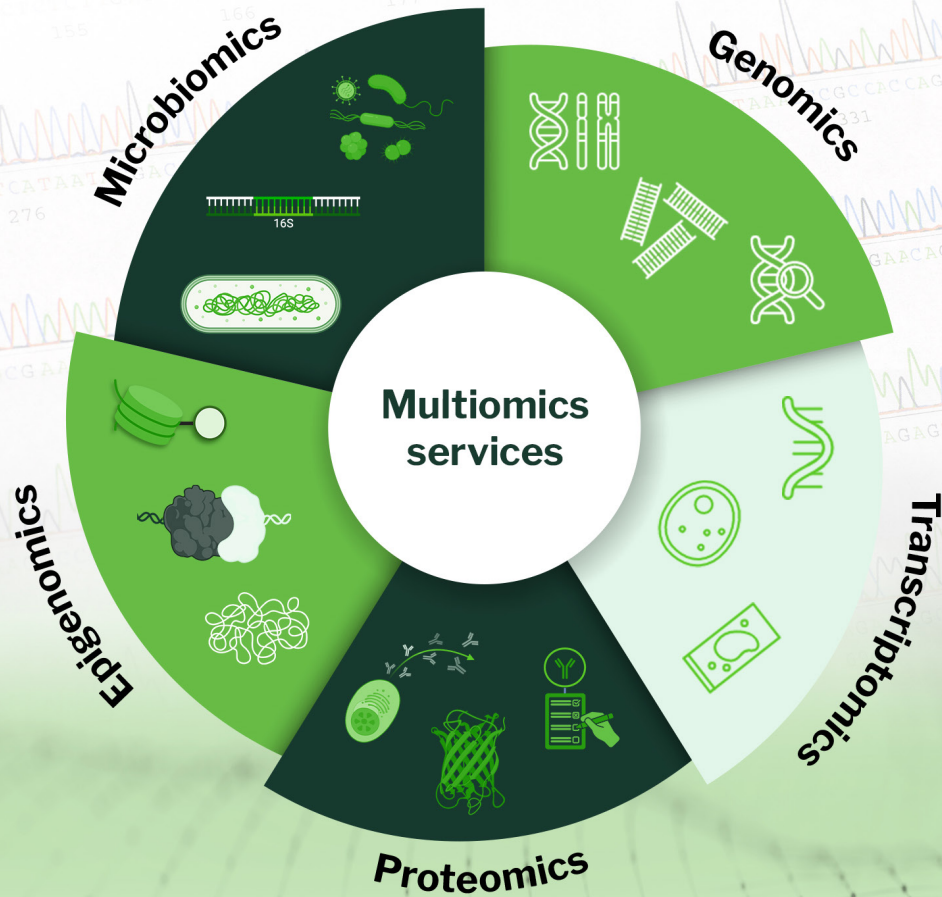
Plot showing correlation between factors



A scatterplot of Factor 1 vs Factor 3 revealing that a few samples are missing the somatic mutation status. Using the tool, we can utilize the molecular profiles to impute the IGHV and trisomy 12 status

## Partner with Signios Bio for your research success

At Signios Bio, we are committed to providing you with the most advanced multiomics solutions. Our team of experts will work closely with you to design and implement customized experiments, ensuring your research achieves its full potential.




# The science of signals, the promise of cures

**A MULTIOMICS RESEARCH PARTNER**

Transcriptomics | Spatial | Single-cell | Immune profiling | Epigenomics | WGS/WES

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