

Product Sheet

Sapio Jarvis



Taming the Data Deluge

The exponential growth in the volume and variety of research data poses a significant challenge for biopharma. This information is often siloed across disconnected systems, including LIMS, ELNs, analytical software, custom applications, and scientific instruments. Consequently, scientists need help accessing, organizing, and analyzing the data in ways that could accelerate their research efforts.

Moreover, cutting-edge AI-based methods hold great promise for in silico analysis of biopharma data. However, the full potential of these innovative techniques can only be realized when the industry's most valuable resources—its collective intelligence from application and instrument data—can be effortlessly accessed and integrated into these models. The untapped potential of these advanced data analysis methods hinders research productivity, as countless insights and efficiency gains remain inaccessible.

Science-Aware™ Informatics Cloud

Jarvis is a Science-Aware™ data integration solution that seamlessly connects and harmonizes instrument and application data, transforming it into a consistent format. This streamlined data is made readily accessible to scientists through user-friendly search tools, data visualizations, and robust analytics across an organization's entire suite of instruments and informatics applications. Uniquely, it does this in a way that provides the scientific context around all the data collected, associating samples or specimens with parsed instrument results, for example. Data is always FAIR and ready for a scientist's analysis or input to AI methods.

Jarvis is also the only low-code, no-code platform and is easily expandable to track any data in your organization. Data and analytics are presented in a way that is easy to discover, apply and understand to any data table and can be extended to encompass new analytic methods as needed.

With Jarvis, organizations can leverage the full power of their unified data and unlock the potential of AI to innovate and optimize research outcomes.



Integrate All Your Data Sources

Browse all your ELN and LIMS systems (Sapio and 3rd party) AND instrument data in one easy-to-navigate knowledge graph. Easily add any new data type to your system. Dashboards summarize the available data and metrics.

Science-Aware™ Built-in Tools

Interactive scientifically intelligent viewers for scientific data so scientists can see biological and chemical entities in the way they expect to see them, including:

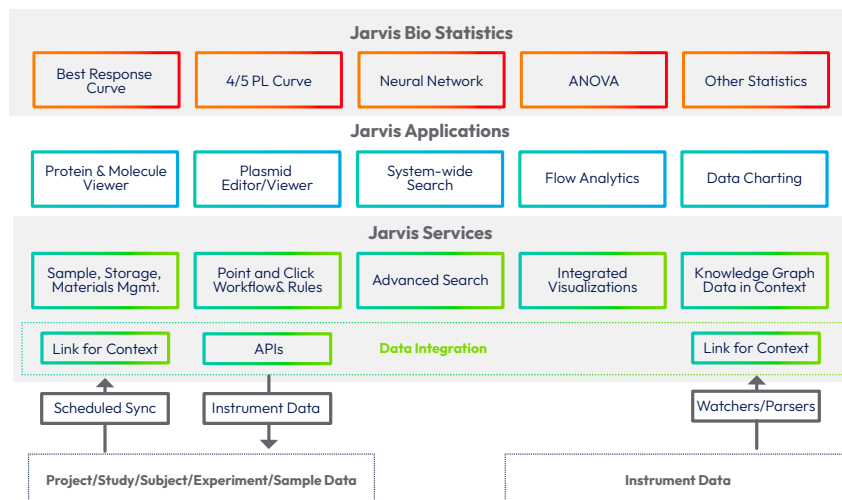
Plasmids (fully annotated) | Proteins (3D) | Small molecules (2D)

Access, Search, Visualize One-Stop-Shop

Search across all data in the system, including instrument results, samples, subjects, experiments, and projects with a no-code, visual query builder scientists can use. Scientifically aware search for objects such as molecules is also built-in.



Jarvis Architecture – Scales Across the Enterprise



Data Collection

Automate the gathering of data from our 200+ instruments supported via file sweep or API software connection.

Automate the sync of project, experiment, entity and sample data from multiple research informatics systems including Sapio LIMS/ELN as well as those from other vendors.



Data Parsing

Automatically parse instrument files using an extensive collection of over 200+ instrument parsers produced by industry experts. **Capture** both the raw data and parsed data. Setup automated pipelines to send parsed data into ELN/LIMS experiments and processes using natural language rules and scripts



Contextualization

Associate the parsed instrument data inside Jarvis with entities such as samples or specimens from the informatics systems providing the scientific context to the data. Generating contextualized, clean and FAIR data is the prerequisite for successful AI analytics.



Advanced Search

Search and retrieve data joined across multiple data sources with built-in graphical query builder. Perform **Scientific Searches** for example substructure and similarity search of molecules.



Visualization

Create and view **Dashboards**. Easily view and chart any data including **instrument data**. Interactive rendering **scientific objects** with viewers for proteins, plasmids and chemical structures.



Scientific Analysis

Apply **statistical methods** including flow cytometry gating and curve fitting. Run **bioinformatics & cheminformatics methods** and drive **Advanced AI/ML capabilities** including neural networks all within Jarvis.

