

Databiology Lab

The central hub for all of your biomedical research



Cloud-based Biomedical Data Management and Analysis Platform

Databiology Lab is a cloud-based platform that provides a central hub for the biomedical research lifecycle. It uniquely enables researchers to work with all types of biomedical data, including genomics, epigenomics, and imaging data. Users can create, collect, store, query, analyse, and share biomedical information.

Additionally, Databiology Lab provides an application onboarding environment which does not require refactoring, making it easy for users to add new or pre-existing applications for their own use, share them with partners or publish them in the Databiology Store.



Data Management Capabilities

Create, Collect, Store and Share

- Create and manage your own projects
- Load and store your own datasets without size limitation
- Databiology Lab supports any biomedical data type such as genomic, transcriptomic, proteomic, metabolomic, epigenomic, imaging, modeling, phenotypic, behavioral, and many more.
- Add and manage biomedical data from your internal datasets and third party public and private sources
- Direct access to many petabytes of data from common biomedical data sources such as NCBI, TCGA, dbGAP, Ensembl, UCSC Genome Browser, Uniprot, Blueprint, Big Brain, 1000 Genomes Project, GIAB, and many more
- Collaborate with partners from all over the world
- Develop, publish and share your own datasets

Annotate

- Annotate data based on ontologies
- Direct access to dozens of ontologies such as GO, HPO, EFO, DOID, and many more
- Create and manage your own Annotations

Query and Organise

- Query data based on any combination of data attributes
- Save and share queries
- Combine multiple queries to create cohorts of interest
- Create and share datasets

Audit and Reproduce

- Data provenance for each data item, from creation throughout analysis iterations and derivatives
- Project logs with filters



Data Analysis Capabilities

Analyse

- Choose from hundreds of biomedical applications available to you to select, analyse, and visualise your data
- Configure and fine-tune application settings
- Configure and fine-tune the parallelisation and server sizes without application or pipeline modifications
- Securely interact with your running applications through your web browser

Inspect

- Keep close track of your analysis runs by accessing real-time application logs
- Monitor resource consumption in real time (CPU, Memory, IO) by container
- Secure shell access from a browser to run applications

Audit and Reproduce

- Push-button reproducibility of each data analysis

Manage and Save

- Leverage dynamic compute capacity in the cloud
- Consumption based pricing, only pay for what you



Continuous Integration Application Onboarding Environment

Develop

- Develop, publish and share your own applications using Databiology CIAO
- Onboard your own source or binaries
- Create application specifications with ease
- Applications are stack independent as middlewares are packaged with the application
- Quick and easy to adapt existing applications, minimal to no refactoring required

Test

- Storage and compute capacity is available to test and optimize applications for all platform configurations
- Common biomedical datasets are readily available
- Real-time inspection capabilities for each container

Publish

- Reach users of dozens of organisations by graduating applications to the Databiology Store
- Deployment of a tested application allows users to be productive on processing data as soon as an application has been approved and/or enabled

FOR MORE INFORMATION

To learn more about Databiology for Enterprise, visit: www.databiology.com

Call us today to learn more or get started with Databiology for Enterprise

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