



MetaboAnalyst 5.0

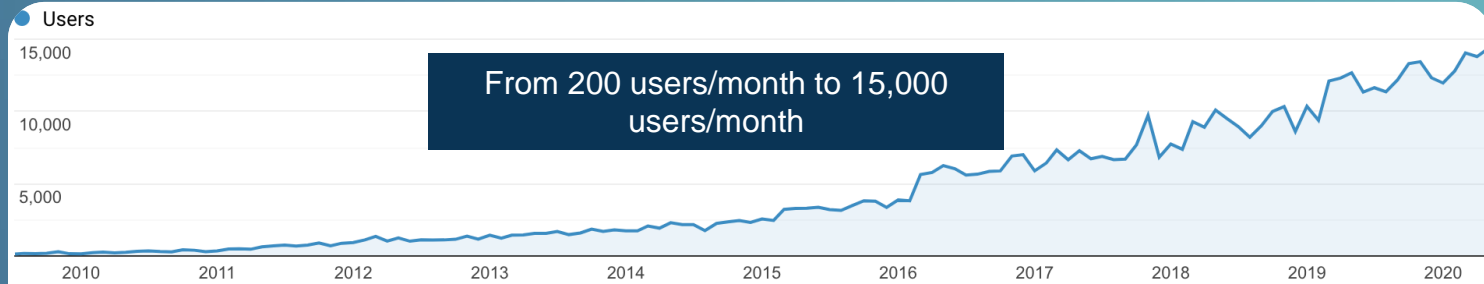
-- a web-based platform for streamlined metabolomics data analysis

A long way to towards version 5.0



	Key Focus	Details
1.0	Statistical analysis for targeted metabolomics	Focused on data processing, normalization and statistical analysis of metabolomics data;
2.0	Functional analysis for targeted metabolomics	Added metabolite set enrichment analysis (MSEA) and metabolic pathway analysis, as well as two-factor and time-series analyses.
3.0	Translational applications	Added biomarker analysis, power analysis, and joint-pathway analysis. Completely updated the web interface
4.0	Global metabolomics and reproducible analysis	Completely revamped web framework for scalable performance, with three new modules (MS peaks to pathways, biomarker meta-analysis, and network explorer), together with a companion R package (MetaboAnalystR)
5.0	Big data analytics - from raw spectra to functional insights	Leveraging local server - public cloud - user browsers to deliver end-to-end metabolomics data analysis, with support for spectral processing, comprehensive functional analysis and meta-analysis. Users can now switch between compatible modules, better graphics

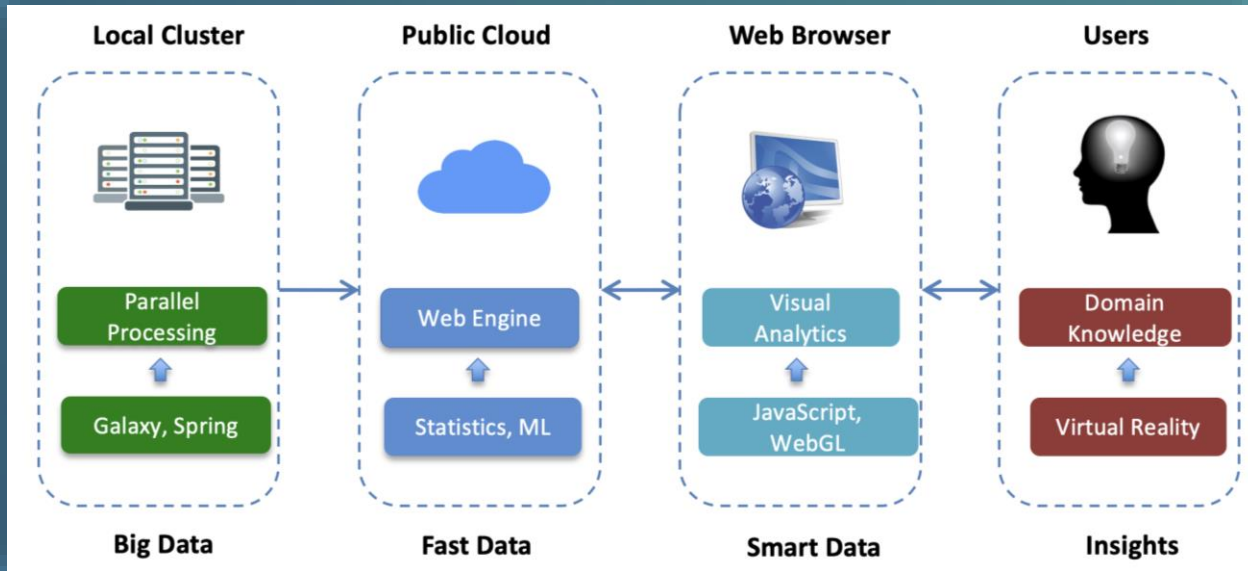
User Traffic (Google Analytics)



Country	Users	% Users
1. United States	83,365	23.47%
2. China	80,969	22.79%
3. United Kingdom	17,671	4.97%
4. Japan	16,913	4.76%
5. Canada	13,858	3.90%
6. India	13,438	3.78%
7. Brazil	11,242	3.16%
8. Germany	10,842	3.05%

>3.5 million jobs submitted from >100,000 users in the past 12 months

Design Concept (under the hood)



Divide & distribute
computing

On-demand computing

Engaging &
empowering users

Help Us Help You

Before you contact,

- **Have you read the Data Format and Tutorials?**

These resources provides detailed explanations for common questions received from users. Please first go through these resources as listed on the left bar.

- **Have you tried to use OmicsForum for some answers?**

OmicsForum (www.omicsforum.ca) is a newly launched platform for users to communicate and share experience when they are doing omics analysis with any tools from our team. FAQs of MetaboAnalyst are provided there and updated more frequently.

- **Have you tried our example data to see if the issue still exists?**

Most of the time, the issue is related to improper data format. Although we try to give informative error messages during data uploading, there are always exceptions. If our example works, download and examine our example datasets to get better idea

- **Did you provide enough details so that the issue can be reproduced?**

Remote troubleshooting requires more information in order to figure out the exact cause of the issue. Please

- Indicate which example data you used, or provide a copy of your data;
- Document all steps leading to the issue. Sometimes screenshots may be necessary

Acknowledgements





New Tutorials for MetaboAnalyst 5.0

1. MS Spectral Processing
2. Functional Analysis (MS Peaks)
3. Meta-Analysis (MS Peaks)
4. Joint Pathway Analysis
5. Enrichment Analysis
6. Network Explorer
7. Statistical Analysis [metadata table]

Input Data Type	Available Modules (click on a module to proceed, or scroll down for more details)					
Raw Spectra (mzML, mzXML or mzData)					LC-MS Spectra Processing ¹	
MS Peaks (peak list or intensity table)			Functional Analysis ²		Functional Meta-analysis ³	
Annotated Features (compound list or table)		Enrichment Analysis ⁵	Pathway Analysis	Joint-Pathway Analysis ⁴		Network Analysis ⁶
Generic Format (.csv or .txt table files)	Statistical Analysis [one factor]	Statistical Analysis [metadata table] ⁷	Biomarker Analysis	Statistical Meta-analysis	Power Analysis	Other Utilities

