

# UniApp Quarterly Update: Trajectory Inference, Interaction analysis, Gene correlation and more

UniApp release note | May 2024

Spring is here, and the Unicle team has been working tirelessly to bring you a harvest of exciting updates. Contact us for a live demonstration and to brainstorm how these upgrades could benefit your project.

#### **Key metrics**



## 5 New algorithms

To analyze your data in more depth and identify novel patterns



## 15 modules

Upgraded with speed and stability improvements



## 4 hours

To map your ambitions onto tech possibilities



#### Maximize benefit

Contact us to learn about these new functionalities and how to leverage them maximally

#### How to get started



- Gene metadata integration
- Pathway analysis
- GeneCards integration



Find out more on how we accelerate biomedical research on Unicle.com

### New and improved functionality

- Trajectory inference: Model gene expression along differentiation trajectories in single cell data
- Cell-Cell interaction: Understand how cell might communicate via receptor-ligand signaling
- Gene regulatory networks: Understand how your genes of interest are regulated by other genes
- Gene correlation analyses: Determine what genes in your dataset have similar expression patterns as your target gene
- Gene cards integration: Explore and quantitatively analyze Genecards data directly via the UniApp
- Gene metadata tables: Upload gene metadata tables such as differential analysis results and integrate with your analysis
- 7 Upgrades and bug fixes: Improved functionality of the pivot table, metadata editor and meta-analysis modules
- Speed updates: Interactive plots now load and update faster. Plot over 250K data points easily

### **Outlook next quarter update**

- Concurrent license model: We plan to release a new licensing model to accommodate smaller and starting laboratories
- Documentation and template: On your request we are creating reference material to inspire and showcase how to use the UniApp
- Landing page: We will update the UniApp landing page to facilitate the exploration of public data portals and Unicle provided analyses templates