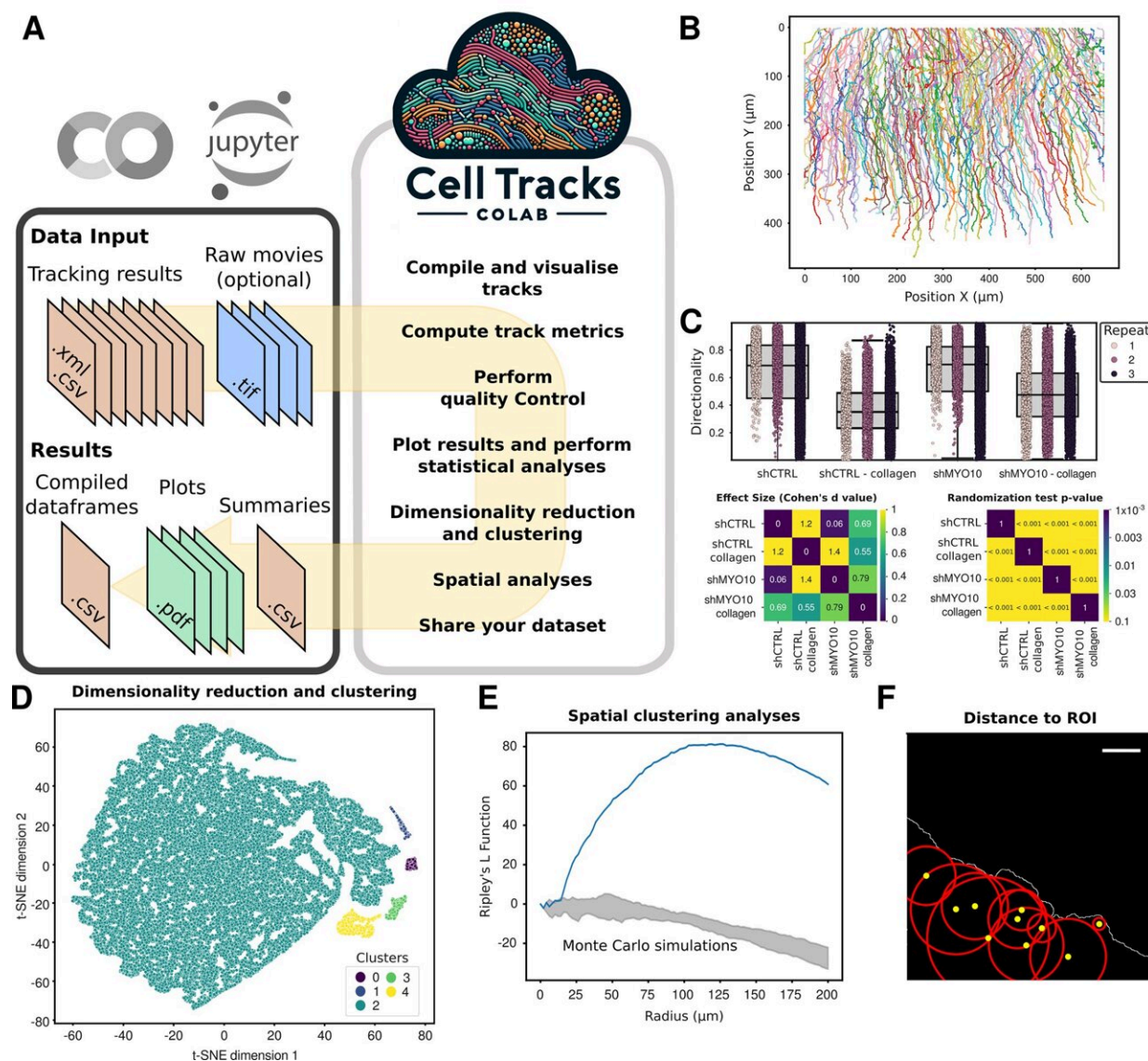


New tool simplifies cell tracking data analysis

August 16 2024



The CellTracksColab platform. Credit: *PLOS Biology* (2024). DOI: 10.1371/journal.pbio.3002740

Studying cell migration is vital because it plays a crucial role in many biological processes, including immune response, wound healing, and cancer metastasis. Understanding how cells move and behave can lead to breakthroughs in treating diseases, developing new drugs, and creating innovative therapies.

For example, in [cancer research](#), tracking how cancer cells migrate can reveal how tumors grow and spread through the human body. This insight can lead to the discovery of more efficient and targeted treatments to stop or even prevent metastasis.

Scientists have introduced CellTracksColab, a tool that simplifies cell tracking data analysis. This free platform leverages advanced techniques to help researchers study cell movement and behavior, which is crucial for understanding diseases and developing new treatments.

The details of CellTracksColab are [published](#) in *PLOS Biology*, and the tool is available on GitHub and Zenodo for researchers worldwide.

CellTracksColab is designed with all researchers in mind, ensuring it is user-friendly regardless of coding skills. It seamlessly integrates with various tracking software, such as TrackMate, to provide a smooth experience for all users.

"CellTracksColab makes it easier for scientists to analyze complex cell migration data and make new discoveries," says Guillaume Jacquemet, one of the lead developers. The platform has already been tested with diverse datasets, revealing new insights into cell behaviors, such as T cell movement and cancer [cell migration](#).

Plans are underway to enhance CellTracksColab further, including adding support for 3D tracking and more advanced features. As an open-source platform, it invites global collaboration to continually improve its

capabilities.

More information: Estibaliz Gómez-de-Mariscal et al, CellTracksColab is a platform that enables compilation, analysis, and exploration of cell tracking data, *PLOS Biology* (2024). [DOI: 10.1371/journal.pbio.3002740](https://doi.org/10.1371/journal.pbio.3002740)

Provided by Abo Akademi University

Citation: New tool simplifies cell tracking data analysis (2024, August 16) retrieved 16 August 2024 from <https://phys.org/news/2024-08-tool-cell-tracking-analysis.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--