# Resource Summary Report

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## PhysiCell Studio

RRID:SCR_025311
Type: Tool

### Proper Citation

PhysiCell Studio (RRID:SCR_025311)

### Resource Information

**URL:** https://github.com/PhysiCell-Tools/PhysiCell-Studio

**Proper Citation:** PhysiCell Studio (RRID:SCR_025311)

**Description:** Software graphical tool to allow easy editing of (XML) model, create initial positions of cells, run simulation, and visualize results. To contribute, fork and make PRs to the development branch. Used to create, execute, and visualize multicellular model using PhysiCell.

**Resource Type:** source code, software resource

**Defining Citation:** PMID:37961612

**Keywords:** create, execute, visualize, multicellular model, create initial positions of cells,

**Funding:** NSF ;
NCI U01 CA232137;
Breast Cancer Research Foundation ;
Jayne Koskinas Ted Giovanis Foundation for Health and Policy ;
European Commission

**Availability:** Free, Available for download, Freely available

**Resource Name:** PhysiCell Studio

**Resource ID:** SCR_025311

**License:** GNU GPL v3

**Record Creation Time:** 20240508T053250+0000

**Record Last Update:** 20260729T044619+0000

### Ratings and Alerts

No rating or validation information has been found for PhysiCell Studio.

No alerts have been found for PhysiCell Studio.

## Data and Source Information

**Source:** SciCrunch Registry

## Usage and Citation Metrics

We found 15 mentions in open access literature.

**Listed below are recent publications.** The full list is available at nidm-terms .


Li R, et al. (2025) Study of combination CAR T-cell treatment for glioblastoma using mathematical modeling. bioRxiv : the preprint server for biology.

Bergman DR, et al. (2025) BIWT: a bioinformatics walkthrough for embedding spatial multiomics in agent-based models for virtual cells. Bioinformatics (Oxford, England), 41(11).

Spinicci K, et al. (2025) Modelling the Impact of HIF on Metabolism and the Extracellular Matrix: Consequences for Tumour Growth and Invasion. Bulletin of mathematical biology, 87(2), 27.

Metzcar J, et al. (2025) A Simple Framework for Agent-Based Modeling with Extracellular Matrix. Bulletin of mathematical biology, 87(3), 43.

Oliver S, et al. (2025) Exploring the role of EMT in ovarian cancer progression using a multiscale mathematical model. NPJ systems biology and applications, 11(1), 36.

Wang Y, et al. (2024) Drug-loaded nanoparticles for cancer therapy: a high-throughput multicellular agent-based modeling study. bioRxiv : the preprint server for biology.

Amiri F, et al. (2024) A three-dimensional lattice-free agent-based model of intracellular ice formation and propagation and intercellular mechanics in liver tissues. Royal Society open science, 11(7), 231337.

L Rocha H, et al. (2024) A multiscale model of immune surveillance in micrometastases gives insights on cancer patient digital twins. NPJ systems biology and applications, 10(1), 144.

Mongeon B, et al. (2024) Spatial computational modelling illuminates the role of the tumour microenvironment for treating glioblastoma with immunotherapies. NPJ systems biology and applications, 10(1), 91.

Heiland R, et al. (2024) PhysiCell Studio: a graphical tool to make agent-based modeling more accessible. GigaByte (Hong Kong, China), 2024, gigabyte128.

Islam MA, et al. (2023) An agent-based modeling approach for lung fibrosis in response to COVID-19. PLoS computational biology, 19(12), e1011741.

Martinson WD, et al. (2023) Dynamic fibronectin assembly and remodeling by leader neural crest cells prevents jamming in collective cell migration. eLife, 12.

Wang Y, et al. (2021) Impact of tumor-parenchyma biomechanics on liver metastatic progression: a multi-model approach. Scientific reports, 11(1), 1710.

Gonçalves IG, et al. (2021) Extracellular matrix density regulates the formation of tumour spheroids through cell migration. PLoS computational biology, 17(2), e1008764.

Rocha HL, et al. (2021) A persistent invasive phenotype in post-hypoxic tumor cells is revealed by fate mapping and computational modeling. iScience, 24(9), 102935.