

Resource Summary Report

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COBRApy

RRID:SCR_012096

Type: Tool

Proper Citation

COBRApy (RRID:SCR_012096)

Resource Information

URL: <http://opencobra.sourceforge.net/openCOBRA/Welcome.html>

Proper Citation: COBRApy (RRID:SCR_012096)

Description: Software Python package that provides support for basic COstraint-Based Reconstruction and Analysis (COBRA) methods.

Synonyms: COBRA for Python

Resource Type: software resource

Defining Citation: [PMID:23927696](#), [DOI:10.1186/1752-0509-7-74](#)

Keywords: software package, mac os x, unix/linux, windows, python, bio.tools

Resource Name: COBRApy

Resource ID: SCR_012096

Alternate IDs: OMICS_05190, biotools:cobrapy

Alternate URLs: <https://bio.tools/cobrapy>

Old URLs: <https://sources.debian.org/src/python3-cobra/>

Record Creation Time: 20220129T080308+0000

Record Last Update: 20260725T190728+0000

Ratings and Alerts

No rating or validation information has been found for COBRApy.

No alerts have been found for COBRApy.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 311 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#).

Aranda-Díaz A, et al. (2025) Assembly of stool-derived bacterial communities follows "early-bird" resource utilization dynamics. *Cell systems*, 16(4), 101240.

Mitchell DV, et al. (2025) *ndufs2*^{-/-} zebrafish have impaired survival, neuromuscular activity, morphology, and one-carbon metabolism treatable with folic acid. *bioRxiv* : the preprint server for biology.

Dronsella B, et al. (2025) One-carbon fixation via the synthetic reductive glycine pathway exceeds yield of the Calvin cycle. *Nature microbiology*, 10(3), 646.

Guzmán-Dinamarca B, et al. (2025) Dynamic metabolic regulation of histone modifications during the yeast metabolic cycle. *PloS one*, 20(5), e0323242.

Weldon M, et al. (2025) Mixotrophy for carbon-conserving waste upcycling. *PLoS computational biology*, 21(8), e1013379.

Vieri W, et al. (2025) Modeling the metabolic response of A2780 ovarian cancer cells to gold-based cytotoxic drugs. *NPJ systems biology and applications*, 11(1), 83.

Haiman ZB, et al. (2025) RBC-GEM: A genome-scale metabolic model for systems biology of the human red blood cell. *PLoS computational biology*, 21(3), e1012109.

Smith EN, et al. (2025) Alternatives to photorespiration: A system-level analysis reveals mechanisms of enhanced plant productivity. *Science advances*, 11(13), eadt9287.

Moyer DC, et al. (2025) MACAW: a method for semi-automatic detection of errors in genome-scale metabolic models. *Genome biology*, 26(1), 79.

Jiang B, et al. (2025) Understanding disease-associated metabolic changes in human colonic epithelial cells using the iColonEpithelium metabolic reconstruction. *PLoS computational biology*, 21(7), e1013253.

Lin YT, et al. (2025) Temporal analysis of doxorubicin-induced cardiac toxicity and hypertrophy. *NPJ systems biology and applications*, 11(1), 67.

Yin Q, et al. (2025) Ecological dynamics of Enterobacteriaceae in the human gut microbiome across global populations. *Nature microbiology*, 10(2), 541.

Sánchez-García S, et al. (2025) Immunometabolic Effect of Nitric Oxide on Human Macrophages Challenged With the SARS-CoV2-Induced Cytokine Storm. A Fluxomic Approach. *Advanced healthcare materials*, 14(1), e2401688.

Kim GB, et al. (2025) Comprehensive evaluation of the capacities of microbial cell factories. *Nature communications*, 16(1), 2869.

Alter TB, et al. (2025) Metabolic growth-coupling strategies for in vivo enzyme selection systems. *Metabolic engineering communications*, 20, e00257.

Ranson A, et al. (2025) Moderate increase in dietary fat induces alterations of microbiota and metabolome along the digestive tract prior to systemic metabolic changes: insights from a pig model. *Gut microbes*, 17(1), 2587964.

Li B, et al. (2025) Bioenergetic stress potentiates antimicrobial resistance and persistence. *Nature communications*, 16(1), 5111.

Lesiczka PM, et al. (2025) Deep sequencing of 16 *Ixodes ricinus* ticks unveils insights into their interactions with endosymbionts. *mSystems*, 10(7), e0050725.

Kulyashov MA, et al. (2025) Modification and analysis of context-specific genome-scale metabolic models: methane-utilizing microbial chassis as a case study. *mSystems*, 10(1), e0110524.

Naeij HB, et al. (2025) Unraveling the metabolic landscape of *Exophiala spinifera* strain FM: Model reconstruction, insights into biodesulfurization and beyond. *PloS one*, 20(1), e0317796.