

# Resource Summary Report

Generated by SPARC SAWG on Jul 28, 2026

## MetaCycle

RRID:SCR\_025729

Type: Tool

### Proper Citation

MetaCycle (RRID:SCR\_025729)

### Resource Information

**URL:** <https://cran.r-project.org/web/packages/MetaCycle/vignettes/implementation.html>

**Proper Citation:** MetaCycle (RRID:SCR\_025729)

**Description:** Software R package for detecting rhythmic signals from large scale time-series data. Used to evaluate periodicity in large scale data.

**Resource Type:** software resource, software toolkit

**Defining Citation:** [PMID:27378304](#)

**Keywords:** detecting rhythmic signals, large scale time-series data, rhythmic signals, evaluate periodicity, large scale data,

**Funding:** NINDS R01NS054794;  
Defence Advanced Research Projects Agency

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

**Resource Name:** MetaCycle

**Resource ID:** SCR\_025729

**Alternate URLs:** <https://github.com/gangwug/MetaCycle>

**License:** GNU GPL v2

**Record Creation Time:** 20240914T053302+0000

**Record Last Update:** 20260725T191508+0000

### Ratings and Alerts

No rating or validation information has been found for MetaCycle.

No alerts have been found for MetaCycle.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 49 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [SPARC SAWG](#).

Hua S, et al. (2025) Genetic disruption of the circadian gene Bmal1 in the intestinal epithelium reduces colonic inflammation. EMBO reports, 26(12), 3138.

Lago Solis B, et al. (2025) Circadian clock-independent ultradian rhythms in lipid metabolism in the Drosophila fat body. The Journal of biological chemistry, 301(6), 110245.

Chen B, et al. (2025) The feasibility of salivary melatonin in assessing perioperative circadian rhythm in surgical patients: study protocol for a multicentre prospective study in China. BMJ open, 15(12), e105679.

Chang J, et al. (2025) Endocytic recycling is central to circadian collagen fibrillogenesis and disrupted in fibrosis. eLife, 13.

Ciampi C, et al. (2025) Intestinal inflammation induces glymphatic remodeling, priming early neurodegenerative signals in male mice. Alzheimer's & dementia : the journal of the Alzheimer's Association, 21(10), e70640.

Greer AJ, et al. (2025) Long-term sub-erythemal UVB exposure does not impact circadian rhythms in mice under standard and rotating shift light conditions. Photochemistry and photobiology, 101(6), 1429.

Li G, et al. (2025) Molecular basis of circadian rhythm divergence between diurnal and nocturnal lepidopterans. iScience, 28(4), 112206.

da Rocha AL, et al. (2025) Exhaustive exercise abolishes REV-ERB-?? circadian rhythm and shifts the kynurenine pathway to a neurotoxic profile in mice. The Journal of physiology, 603(14), 3923.

Bento I, et al. (2025) Parasite and vector circadian clocks mediate efficient malaria transmission. Nature microbiology, 10(4), 882.

Kang SW, et al. (2025) Drosophila peptidyl-prolyl cis/trans isomerase-like 4 regulates circadian rhythm by supporting high-amplitude oscillations of PERIOD. iScience, 28(5), 112457.

Duan J, et al. (2024) tauFisher predicts circadian time from a single sample of bulk and single-cell pseudobulk transcriptomic data. *Nature communications*, 15(1), 3840.

Kapar SGC, et al. (2024) Effects of resveratrol on in vitro circadian clock gene expression in young and older human adipose-derived progenitor cells. *Aging*, 16(1), 1.

van Rosmalen L, et al. (2024) Energy balance drives diurnal and nocturnal brain transcriptome rhythms. *Cell reports*, 43(3), 113951.

Iascone DM, et al. (2024) Hypermetabolic state is associated with circadian rhythm disruption in mouse and human cancer cells. *Proceedings of the National Academy of Sciences of the United States of America*, 121(30), e2319782121.

Niu Y, et al. (2024) Targeting the intestinal circadian clock by meal timing ameliorates gastrointestinal inflammation. *Cellular & molecular immunology*, 21(8), 842.

de Assis LVM, et al. (2024) Tuning of liver circadian transcriptome rhythms by thyroid hormone state in male mice. *Scientific reports*, 14(1), 640.

Chen R, et al. (2024) Circadian-driven tissue specificity is constrained under caloric restricted feeding conditions. *Communications biology*, 7(1), 752.

Ryu JE, et al. (2024) Circadian regulation of endoplasmic reticulum calcium response in cultured mouse astrocytes. *eLife*, 13.

Tan X, et al. (2024) Novel Insights into the Circadian Rhythms Based on Long Noncoding and Circular RNA Profiling. *International journal of molecular sciences*, 25(2).

Neumann J, et al. (2024) The Free-Running Circasemilunar Period Is Determined by Counting Circadian Clock Cycles in the Marine Midge *Clunio Marinus*. *Journal of biological rhythms*, 39(4), 379.