

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

Wheel Running Activity acQquisition

RRID:SCR_023353

Type: Tool

Proper Citation

Wheel Running Activity acQquisition (RRID:SCR_023353)

Resource Information

URL: <https://github.com/neurobio-hiroshima/WRAQ>

Proper Citation: Wheel Running Activity acQquisition (RRID:SCR_023353)

Description: Open source microcontroller based system for wheel running activity in mice. Used to track circadian rhythms of rodents using microcontroller, powered by lithium polymer battery, and surveys exercise activity for up to 30 days. Data can be stored on microSD card or using online server using WiFi connection. Python software provides system interface with ActogramJ to analyze chronobiological aspects of data. Repository includes guide for installing integrated development environment and dependent libraries for building and setting up WRAQ systems - WRAQ and WRAQ-Wifi. WRAQ and WRAQ-Wifi are based on Adafruit Adalogger and DFRobot FireBeetle ESP32 connected to 4- and 8-bit binary counters receiving signal from reed switch attached to 5-inch flying saucer respectively.

Abbreviations: WRAQ

Synonyms: WRAQ system, Wheel Running Activity acQquisition system

Resource Type: software resource

Defining Citation: [PMID:34479979](#)

Keywords: OpenBehavior, instrument, building and setting up WRAQ systems, measure mouse wheel running activity, mouse wheel running, monitor wheel running activity,

Availability: Free, Freely available

Resource Name: Wheel Running Activity acQquisition

Resource ID: SCR_023353

Alternate URLs: <https://edspace.american.edu/openbehavior/project/wraq/>

License: GNU GPL v3.0

Record Creation Time: 20230310T050222+0000

Record Last Update: 20260808T190245+0000

Ratings and Alerts

No rating or validation information has been found for Wheel Running Activity acQquisition.

No alerts have been found for Wheel Running Activity acQquisition.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.