Resource Summary Report

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Neuroscience Gateway

RRID:SCR_008915 Type: Tool

Proper Citation

Neuroscience Gateway (RRID:SCR_008915)

Resource Information

URL: http://www.nsgportal.org/

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Description: Web portal that allows free access to supercomputing resources for large scale modeling and data processing. Portal facilitates access and use of National Science Foundation (NSF) High Performance Computing (HPC) resources by neuroscientists.

Abbreviations: NSG

Synonyms: Neuroscience Gateway - A Portal for Computational Neuroscience, Neuroscience Gateway, Neuroscience Gateway (NSG) Portal

Resource Type: software resource, data or information resource, portal, project portal

Keywords: Large, scale, modeling, data, computing, neuroscience, neuron, BRAIN Initiative

Funding: NSF 1458840; NSF 1458495; BBSRC N005236; NIBIB R01 EB023297; NSF 1339856; NSF 1146949

Availability: Free, Freely available

Resource Name: Neuroscience Gateway

Resource ID: SCR_008915

Alternate IDs: nlx_151553, SCR_015767

Alternate URLs: http://www.nitrc.org/projects/nsg/

Record Creation Time: 20220129T080250+0000

Record Last Update: 20250517T055915+0000

Ratings and Alerts

No rating or validation information has been found for Neuroscience Gateway.

No alerts have been found for Neuroscience Gateway.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 23 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>dkNET</u>.

Sinha A, et al. (2025) The NeuroML ecosystem for standardized multi-scale modeling in neuroscience. eLife, 13.

Mäki-Marttunen V, et al. (2025) Strength of Low-Frequency EEG Phase Entrainment to External Stimuli Is Associated with Fluctuations in the Brain's Internal State. eNeuro, 12(1).

lyer S, et al. (2024) The BRAIN Initiative data-sharing ecosystem: Characteristics, challenges, benefits, and opportunities. eLife, 13.

Tolley N, et al. (2024) Methods and considerations for estimating parameters in biophysically detailed neural models with simulation based inference. PLoS computational biology, 20(2), e1011108.

Cavarretta F, et al. (2023) Modeling Synaptic Integration of Bursty and ? Oscillatory Inputs in Ventromedial Motor Thalamic Neurons in Normal and Parkinsonian States. eNeuro, 10(12).

Martínez-Cancino R, et al. (2021) The open EEGLAB portal Interface: High-Performance computing with EEGLAB. NeuroImage, 224, 116778.

Iturria-Medina Y, et al. (2021) Integrating molecular, histopathological, neuroimaging and clinical neuroscience data with NeuroPM-box. Communications biology, 4(1), 614.

Navas-Olive A, et al. (2020) Multimodal determinants of phase-locked dynamics across deepsuperficial hippocampal sublayers during theta oscillations. Nature communications, 11(1), 2217.

O'Halloran DM, et al. (2020) Module for SWC neuron morphology file validation and correction enabled for high throughput batch processing. PloS one, 15(1), e0228091.

Neymotin SA, et al. (2020) Human Neocortical Neurosolver (HNN), a new software tool for interpreting the cellular and network origin of human MEG/EEG data. eLife, 9.

Prager EM, et al. (2020) Dopamine Oppositely Modulates State Transitions in Striosome and Matrix Direct Pathway Striatal Spiny Neurons. Neuron, 108(6), 1091.

Feng F, et al. (2019) Gamma Oscillations in the Basolateral Amygdala: Biophysical Mechanisms and Computational Consequences. eNeuro, 6(1).

Dura-Bernal S, et al. (2019) NetPyNE, a tool for data-driven multiscale modeling of brain circuits. eLife, 8.

Gleeson P, et al. (2019) Open Source Brain: A Collaborative Resource for Visualizing, Analyzing, Simulating, and Developing Standardized Models of Neurons and Circuits. Neuron, 103(3), 395.

, et al. (2019) 28th Annual Computational Neuroscience Meeting: CNS*2019. BMC neuroscience, 20(Suppl 1), 56.

Hsu SH, et al. (2018) Modeling brain dynamic state changes with adaptive mixture independent component analysis. NeuroImage, 183, 47.

Senk J, et al. (2018) VIOLA-A Multi-Purpose and Web-Based Visualization Tool for Neuronal-Network Simulation Output. Frontiers in neuroinformatics, 12, 75.

, et al. (2018) 27th Annual Computational Neuroscience Meeting (CNS*2018): Part One. BMC neuroscience, 19(Suppl 2), 64.

Forrest MD, et al. (2015) Simulation of alcohol action upon a detailed Purkinje neuron model and a simpler surrogate model that runs >400 times faster. BMC neuroscience, 16, 27.

Zaytsev YV, et al. (2015) Reconstruction of recurrent synaptic connectivity of thousands of neurons from simulated spiking activity. Journal of computational neuroscience, 39(1), 77.