Resource Summary Report

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NRCAM

RRID:SCR_006134
Type: Tool

Proper Citation

NRCAM (RRID:SCR_006134)

Resource Information

URL: http://www.nrcam.uchc.edu/

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Description: Biomedical technology research center that develops new technologies for modeling cell biological processes. The technologies are integrated through Virtual Cell, a problem-solving environment built on a central database and disseminated as a Web application for the analysis, modeling and simulation of cell biological processes. NRCAM resides at the Center for Cell Analysis and Modeling, CCAM, and provides a vast array of laboratory equipment that can be used for obtaining experimental data needed to create and enhance Virtual Cell models. Microscopy instrumentation includes three confocal laser scanning microscopes including UV excitation, nonlinear optical microscopy utilizing a titanium sapphire pulsed laser, confocal-based fluorescence correlation spectroscopy, wide-field imaging workstation with cooled CCD and rapid excitation filter wheel, and dual-wavelength spectrofluorometer. Access to the facilities and technical staff is open to all researchers.

Abbreviations: NRCAM

Synonyms: The National Resource for Cell Analysis and Modeling, National Resource of Cell Analysis and Modeling, National Resource of Cell Analysis and Modeling (NRCAM), National Resource for Cell Analysis and Modeling, National Resource of Cell Analysis & Modeling (NRCAM)

Resource Type: service resource, access service resource, training resource, biomedical technology research center

Keywords: modeling, simulation, cell, microscopy, software, biological process, model, cell model, informatics, computing and informatics technology center, FASEB list

Funding: NIGMS ;
NCRR ;
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Resource Name: NRCAM

Resource ID: SCR_006134

Alternate IDs: nif-0000-03953

Record Creation Time: 20220129T080234+0000

Record Last Update: 20250524T060106+0000

Ratings and Alerts

No rating or validation information has been found for NRCAM.

No alerts have been found for NRCAM.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 74 mentions in open access literature.

Listed below are recent publications. The full list is available at NIF.

Desu HL, et al. (2024) A rapid review of differences in cerebrospinal neurofilament light levels in clinical subtypes of progressive multiple sclerosis. Frontiers in neurology, 15, 1382468.

Jiao L, et al. (2024) miR-153 promotes neural differentiation by activating the cell adhesion/Ca2+ signaling pathway and targeting ion channel activity in HT-22 cells by bioinformatic analysis. Heliyon, 10(9), e30204.

Ogawa Y, et al. (2023) Antibody-directed extracellular proximity biotinylation reveals that Contactin-1 regulates axo-axonic innervation of axon initial segments. Nature communications, 14(1), 6797.

Cheng Y, et al. (2022) NrCAM secreted by endometrial stromal cells enhances the progestin

sensitivity of endometrial cancer cells through epigenetic modulation of PRB. Cancer gene therapy, 29(10), 1452.

Bai C, et al. (2022) NRCAM acts as a prognostic biomarker and promotes the tumor progression in gastric cancer via EMT pathway. Tissue & cell, 77, 101859.

Ji L, et al. (2022) TCR CDR3 Sequencing as a Clue to Elucidate the Landscape of Dysimmunity in Patients with Primary Immune Thrombocytopenia. Journal of clinical medicine, 11(19).

Stevens SR, et al. (2021) Ankyrin-R regulates fast-spiking interneuron excitability through perineuronal nets and Kv3.1b K+ channels. eLife, 10.

Elmentaite R, et al. (2021) Cells of the human intestinal tract mapped across space and time. Nature, 597(7875), 250.

Jin H, et al. (2021) An Essential NRP1-Mediated Role for Tagln2 in Gastric Cancer Angiogenesis. Frontiers in oncology, 11, 653246.

Scapin G, et al. (2021) A conserved Neurite Outgrowth and Guidance motif with biomimetic potential in neuronal Cell Adhesion Molecules. Computational and structural biotechnology journal, 19, 5622.

Chen ZH, et al. (2020) Matrix metalloprotease-mediated cleavage of neural glial-related cell adhesion molecules activates quiescent olfactory stem cells via EGFR. Molecular and cellular neurosciences, 108, 103552.

Bekku Y, et al. (2020) Independent anterograde transport and retrograde cotransport of domain components of myelinated axons. The Journal of cell biology, 219(6).

Tenner B, et al. (2020) Spatially compartmentalized phase regulation of a Ca2+-cAMP-PKA oscillatory circuit. eLife, 9.

Takano T, et al. (2020) Chemico-genetic discovery of astrocytic control of inhibition in vivo. Nature, 588(7837), 296.

Ling XH, et al. (2019) miR?505 suppresses prostate cancer progression by targeting NRCAM. Oncology reports, 42(3), 991.

Kruse M, et al. (2019) Reinterpretation of the substrate specificity of the voltage-sensing phosphatase during dimerization. The Journal of general physiology, 151(2), 258.

Brummer T, et al. (2019) NrCAM is a marker for substrate-selective activation of ADAM10 in Alzheimer's disease. EMBO molecular medicine, 11(4).

Alpizar SA, et al. (2019) Loss of Neurofascin-186 Disrupts Alignment of AnkyrinG Relative to Its Binding Partners in the Axon Initial Segment. Frontiers in cellular neuroscience, 13, 1.

Mohan V, et al. (2019) Expression and Function of Neuron-Glia-Related Cell Adhesion

Molecule (NrCAM) in the Amygdalar Pathway. Frontiers in cell and developmental biology, 7, 9.

Getz M, et al. (2019) A predictive computational model reveals that GIV/girdin serves as a tunable valve for EGFR-stimulated cyclic AMP signals. Molecular biology of the cell, 30(13), 1621.