Resource Summary Report

Generated by <u>NIF</u> on May 24, 2025

Biomedical Simulations Resource

RRID:SCR_001952 Type: Tool

Proper Citation

Biomedical Simulations Resource (RRID:SCR_001952)

Resource Information

URL: http://bmsr.usc.edu/

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Description: Biomedical technology resource center dedicated to the advancement of the state-of-the-art in biomedical modeling and simulation through Core and Collaborative Research projects, as well as the dissemination of this knowledge and related software through Service, Training and Dissemination activities aimed at the biomedical community at large. The BMSR includes four core research projects: * Pharmacokinetic/Pharmacodynamic Systems Analysis * Nonlinear Modeling of Complex Biomedical Systems * Modeling of Autonomic, Metabolic and Vascular Control Interactions * Nonlinear Modeling of the Hippocampus Fifteen Collaborative Research Projects serve as challenging test grounds for the Resource's methodologies and expertise.

Abbreviations: BMSR

Synonyms: Biomedical Simulations Resource (BMSR)

Resource Type: biomedical technology resource center, training resource

Keywords: hippocampus, modeling, simulation, model, pharmacokinetic, pharmacodynamic, systems analysis, nonlinear modeling, complex biomedical system, autonomic, metabolic, vascular control, interaction, intracellular signalling, biomarker

Related Condition: Cancer, Alzheimer's disease, Metabolic syndrome

Funding: NIBIB P41-EB001978

Resource Name: Biomedical Simulations Resource

Resource ID: SCR_001952

Alternate IDs: nif-0000-10530

Old URLs: http://bmsr.usc.edu/index.html

Record Creation Time: 20220129T080210+0000

Record Last Update: 20250523T054216+0000

Ratings and Alerts

No rating or validation information has been found for Biomedical Simulations Resource.

No alerts have been found for Biomedical Simulations Resource.

Data and Source Information

Source: <u>SciCrunch Registry</u>

Usage and Citation Metrics

We found 8 mentions in open access literature.

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

Shetake NG, et al. (2019) Iron-oxide nanoparticles target intracellular HSP90 to induce tumor radio-sensitization. Biochimica et biophysica acta. General subjects, 1863(5), 857.

Dumond JB, et al. (2017) p16INK4a , a Senescence Marker, Influences Tenofovir/Emtricitabine Metabolite Disposition in HIV-Infected Subjects. CPT: pharmacometrics & systems pharmacology, 6(2), 120.

Choquette A, et al. (2017) Pharmacokinetics of Lidocaine Hydrochloride Administered with or without Adrenaline for the Paravertebral Brachial Plexus Block in Dogs. PloS one, 12(1), e0169745.

Dumond JB, et al. (2017) Population Pharmacokinetics Modeling of Unbound Efavirenz, Atazanavir, and Ritonavir in HIV-Infected Subjects With Aging Biomarkers. CPT: pharmacometrics & systems pharmacology, 6(2), 128.

Morrison A, et al. (2015) Defining medication adherence in individual patients. Patient preference and adherence, 9, 893.

Reddy MB, et al. (2015) Oseltamivir Population Pharmacokinetics in the Ferret: Model Application for Pharmacokinetic/Pharmacodynamic Study Design. PloS one, 10(10),

e0138069.

Kang Y, et al. (2015) Principal Dynamic Mode Analysis of EEG Data for Assisting the Diagnosis of Alzheimer's Disease. IEEE journal of translational engineering in health and medicine, 3, 1800110.

Panetta JC, et al. (2010) Modeling mechanisms of in vivo variability in methotrexate accumulation and folate pathway inhibition in acute lymphoblastic leukemia cells. PLoS computational biology, 6(12), e1001019.