Resource Summary Report

Generated by RRID on May 21, 2025

Physiome.jp

RRID:SCR_012944
Type: Tool

Proper Citation

Physiome.jp (RRID:SCR_012944)

Resource Information

URL: http://www.physiome.jp/

Proper Citation: Physiome.jp (RRID:SCR_012944)

Description: Physiome.jp has been established to provide building blocks useful to develop in silico human. The blocks will include mathematical models and experimental data representing physiological functions. Physiome.jp is a part of the Worldwide Integrative Biomedical Research Cooperation to promote Physiome and Systems Biology. The building blocks (modules, models, biological data) representing biological functions and structure are databased and served as elements in the catalogue of human knowledge. They can be reused for deeper understanding of human physiology, eventually contributing to establishment of in silico medicine and predictive medicine. The databases (insilicoDB) at www.physiome.jp currently include a Model Database and a Morphology Database. The Model Database stores a number of modules representing biological/physiological functions. Those models are formulated by mathematical equations to describe dynamic changes of states, i.e., specific biological functions. All models in the database are written in an XML format called insilicoML. The Morphology Database provides datasets representing morphometric models of biological organs. The morphometric data are provided in several data-types including surface data such as STL and VRML and volume/voxel data. The database contents are in the public domain and aim to provide valuable models to the scientific community for model sharing/reuse, simulation, model validation, visualization of biological structure, and morphology-based dynamic simulation of biological functions. These can be accomplished by combining insilicoML models with appropriate morphology datasets. Models and related data in the insilicoDB may be freely downloaded and reused for non-profit scientific purposes. When using the models in the Model Database, we ask the users to respect the effort spent in arranging/serving the mathematical models as well as the original model construction. For any reuse of the morphology data, we also ask the users to respect the intellectual property of those who provided the original data. This should be done by acknowledging insilicoDB@physiome.jp for model reuse and by including appropriate

attribution information for any reuse of the morphology data. The insilicoDB owners will not be held responsible for misuse of the Morphology Database and/or Model Database, or damage caused by use of the data and models contained therein.

Abbreviations: Physiome

Resource Type: data or information resource, simulation software, topical portal, database, software resource, portal, software application

Keywords: function, biological, biomedical, building block, human, in silico human, mathematical model, medicine, model, morphology, physiological, physiology, structure, systems biology

Funding:

Resource Name: Physiome.jp

Resource ID: SCR_012944

Alternate IDs: nif-0000-10484

Record Creation Time: 20220129T080313+0000

Record Last Update: 20250521T061441+0000

Ratings and Alerts

No rating or validation information has been found for Physiome.jp.

No alerts have been found for Physiome.jp.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 5 mentions in open access literature.

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

Uchida S, et al. (2019) Integrative and theoretical research on the architecture of a biological system and its disorder. The journal of physiological sciences : JPS, 69(3), 433.

Furutani K, et al. (2017) HD Physiology Project-Japanese efforts to promote multilevel integrative systems biology and physiome research. NPJ systems biology and applications, 3, 1.

Asai Y, et al. (2015) Databases for multilevel biophysiology research available at Physiome.jp. Frontiers in physiology, 6, 251.

Dräger A, et al. (2014) Improving collaboration by standardization efforts in systems biology. Frontiers in bioengineering and biotechnology, 2, 61.

Tsumoto K, et al. (2014) Ischemia-related subcellular redistribution of sodium channels enhances the proarrhythmic effect of class I antiarrhythmic drugs: a simulation study. PloS one, 9(10), e109271.