Resource Summary Report

Generated by ASWG on Apr 30, 2025

Cell Centered Database

RRID:SCR_002168
Type: Tool

Proper Citation

Cell Centered Database (RRID:SCR_002168)

Resource Information

URL: http://ccdb.ucsd.edu

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Description: THIS RESOURCE IS NO LONGER IN SERVICE, documented June 5, 2017. It has been merged with Cell Image Library. Database for sharing and mining cellular and subcellular high resolution 2D, 3D and 4D data from light and electron microscopy, including correlated imaging that makes unique and valuable datasets available to the scientific community for visualization, reuse and reanalysis. Techniques range from wide field mosaics taken with multiphoton microscopy to 3D reconstructions of cellular ultrastructure using electron tomography. Contributions from the community are welcome. The CCDB was designed around the process of reconstruction from 2D micrographs, capturing key steps in the process from experiment to analysis. The CCDB refers to the set of images taken from microscope the as the Microscopy Product. The microscopy product refers to a set of related 2D images taken by light (epifluorescence, transmitted light, confocal or multiphoton) or electron microscopy (conventional or high voltage transmission electron microscopy). These image sets may comprise a tilt series, optical section series, through focus series, serial sections, mosaics, time series or a set of survey sections taken in a single microscopy session that are not related in any systematic way. A given set of data may be more than one product, for example, it is possible for a set of images to be both a mosaic and a tilt series. The Microscopy Product ID serves as the accession number for the CCDB. All microscopy products must belong to a project and be stored along with key specimen preparation details. Each project receives a unique Project ID that groups together related microscopy products. Many of the datasets come from published literature, but publication is not a prerequisite for inclusion in the CCDB. Any datasets that are of high quality and interest to the scientific community can be included in the CCDB.

Abbreviations: CCDB

Synonyms: CCDB, Cell-Centered Database

Resource Type: data repository, service resource, database, image repository, storage service resource, data or information resource

Defining Citation: PMID:18054501, PMID:12160711

Keywords: electron microscope, light microscopy, electron tomography, electron microscopy, image, cell, microscopy, tomography

Funding:

Availability: THIS RESOURCE IS NO LONGER IN SERVICE

Resource Name: Cell Centered Database

Resource ID: SCR_002168

Alternate IDs: nif-0000-00007

Record Creation Time: 20220129T080211+0000

Record Last Update: 20250430T055137+0000

Ratings and Alerts

No rating or validation information has been found for Cell Centered Database.

No alerts have been found for Cell Centered Database.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 31 mentions in open access literature.

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

Barupal DK, et al. (2022) CCDB: A database for exploring inter-chemical correlations in metabolomics and exposomics datasets. Environment international, 164, 107240.

Gu D, et al. (2021) AGO-accessible anticancer siRNAs designed with synergistic miRNA-like activity. Molecular therapy. Nucleic acids, 23, 1172.

Meneur C, et al. (2021) Analysis of Nuclear Encoded Mitochondrial Gene Networks in

Cervical Cancer. Asian Pacific journal of cancer prevention : APJCP, 22(6), 1799.

Jike W, et al. (2020) Phylogenomic proof of Recurrent Demipolyploidization and Evolutionary Stalling of the "Triploid Bridge" in Arundo (Poaceae). International journal of molecular sciences, 21(15).

Huemer P, et al. (2020) Revision of the genus Hoplodrina Boursin, 1937 (Lepidoptera, Noctuidae, Xyleninae). I. Hoplodrina octogenaria (Goeze, 1781) and its sister species H. alsinides (Costantini, 1922) sp. rev. in Europe. ZooKeys, 927, 75.

Pykälä J, et al. (2020) Taxonomy of Verrucaria species characterised by large spores, perithecia leaving pits in the rock and a pale thin thallus in Finland. MycoKeys, 72, 43.

Amin SA, et al. (2019) Towards creating an extended metabolic model (EMM) for E. coli using enzyme promiscuity prediction and metabolomics data. Microbial cell factories, 18(1), 109.

Bearer EL, et al. (2018) Alterations of functional circuitry in aging brain and the impact of mutated APP expression. Neurobiology of aging, 70, 276.

Cetina K, et al. (2018) Multi-class segmentation of neuronal structures in electron microscopy images. BMC bioinformatics, 19(1), 298.

Ilouz R, et al. (2017) Isoform-specific subcellular localization and function of protein kinase A identified by mosaic imaging of mouse brain. eLife, 6.

Márquez Neila P, et al. (2016) A Fast Method for the Segmentation of Synaptic Junctions and Mitochondria in Serial Electron Microscopic Images of the Brain. Neuroinformatics, 14(2), 235.

Gwiazdowski RA, et al. (2015) The hemiptera (insecta) of Canada: constructing a reference library of DNA barcodes. PloS one, 10(4), e0125635.

Rash JE, et al. (2015) Heterotypic gap junctions at glutamatergic mixed synapses are abundant in goldfish brain. Neuroscience, 285, 166.

Patwardhan A, et al. (2014) A 3D cellular context for the macromolecular world. Nature structural & molecular biology, 21(10), 841.

Cone AC, et al. (2013) A comparative antibody analysis of pannexin1 expression in four rat brain regions reveals varying subcellular localizations. Frontiers in pharmacology, 4, 6.

Witkiewicz H, et al. (2013) I. Embryonal vasculature formation recapitulated in transgenic mammary tumor spheroids implanted pseudo-orthotopicly into mouse dorsal skin fold: the organoblasts concept. F1000Research, 2, 8.

Maynard SM, et al. (2013) A knowledge based approach to matching human neurodegenerative disease and animal models. Frontiers in neuroinformatics, 7, 7.

Niethammer M, et al. (2013) Segmentation with area constraints. Medical image analysis, 17(1), 101.

Burette AC, et al. (2012) Electron tomographic analysis of synaptic ultrastructure. The Journal of comparative neurology, 520(12), 2697.

Swedlow JR, et al. (2012) Innovation in biological microscopy: current status and future directions. BioEssays : news and reviews in molecular, cellular and developmental biology, 34(5), 333.