Resource Summary Report

Generated by NIF on May 22, 2025

BICCN

RRID:SCR 015820

Type: Tool

Proper Citation

BICCN (RRID:SCR_015820)

Resource Information

URL: https://biccn.org

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Description: Consortium for the cell census in the brain. Integrated network of data generating centers, data archives, and data standards developers, with the goal of systematic multimodal brain cell type profiling and characterization. Emphasis of the BICCN is on the whole mouse brain with demonstration of prototype feasibility for human and nonhuman primate brains.

Abbreviations: BICCN

Synonyms: BICCN 2.0, BRAIN Initiative Cell Census Network, BRAIN Initiative Cell Census

Network (BICCN)

Resource Type: portal, organization portal, consortium, data or information resource

Defining Citation: PMID:37390046

Keywords: cell census, neuroscience, brain, brain initiative cell census network, whole

mouse brain,

Funding: NIMH U19 MH114821;

NIMH U19 MH114830; NIMH U19 MH114831

Availability: Restricted

Resource Name: BICCN

Resource ID: SCR_015820

Alternate IDs: SCR_017266

Record Creation Time: 20220129T080327+0000

Record Last Update: 20250522T061011+0000

Ratings and Alerts

No rating or validation information has been found for BICCN.

No alerts have been found for BICCN.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 212 mentions in open access literature.

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

Miao Z, et al. (2025) Depth-corrected multi-factor dissection of chromatin accessibility for scATAC-seq data with PACS. Nature communications, 16(1), 401.

Stouffer KM, et al. (2024) Cross-modality mapping using image varifolds to align tissue-scale atlases to molecular-scale measures with application to 2D brain sections. Nature communications, 15(1), 3530.

Park J, et al. (2024) Integrated platform for multiscale molecular imaging and phenotyping of the human brain. Science (New York, N.Y.), 384(6701), eadh9979.

Kenney M, et al. (2024) The Brain Image Library: A Community-Contributed Microscopy Resource for Neuroscientists. bioRxiv: the preprint server for biology.

Wang W, et al. (2024) Single-cell and spatial alterations of neural cells and circuits in clinical and translational medicine. Clinical and translational medicine, 14(6), e1696.

Stouffer KM, et al. (2024) xIV-LDDMM Toolkit: A Suite of Image-Varifold Based Technologies for Representing and Mapping 3D Imaging and Spatial-omics Data Simultaneously Across Scales. bioRxiv: the preprint server for biology.

Roux de Bézieux H, et al. (2024) Improving replicability in single-cell RNA-Seq cell type discovery with Dune. BMC bioinformatics, 25(1), 198.

Schaub DP, et al. (2024) PCA-based spatial domain identification with state-of-the-art performance. Bioinformatics (Oxford, England), 41(1).

Carraro C, et al. (2024) Tackling neurodegeneration in vitro with omics: a path towards new targets and drugs. Frontiers in molecular neuroscience, 17, 1414886.

Hu Z, et al. (2024) CellWalker2: multi-omic discovery of hierarchical cell type relationships and their associations with genomic annotations. bioRxiv: the preprint server for biology.

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

Dong P, et al. (2024) A multi-regional human brain atlas of chromatin accessibility and gene expression facilitates promoter-isoform resolution genetic fine-mapping. Nature communications, 15(1), 10113.

Liu Y, et al. (2024) Neuronal diversity and stereotypy at multiple scales through whole brain morphometry. Nature communications, 15(1), 10269.

Kalhor K, et al. (2024) Mapping human tissues with highly multiplexed RNA in situ hybridization. Nature communications, 15(1), 2511.

Puelles L, et al. (2024) Genoarchitectural Definition of the Adult Mouse Mesocortical Ring: A Contribution to Cortical Ring Theory. The Journal of comparative neurology, 532(7), e25647.

Hawrylycz M, et al. (2023) A guide to the BRAIN Initiative Cell Census Network data ecosystem. PLoS biology, 21(6), e3002133.

Moore J, et al. (2023) OME-Zarr: a cloud-optimized bioimaging file format with international community support. Histochemistry and cell biology, 160(3), 223.

Ament SA, et al. (2023) A single-cell genomic atlas for maturation of the human cerebellum during early childhood. Science translational medicine, 15(721), eade1283.

Chiou KL, et al. (2023) A single-cell multi-omic atlas spanning the adult rhesus macaque brain. Science advances, 9(41), eadh1914.

Wilbers R, et al. (2023) Structural and functional specializations of human fast-spiking neurons support fast cortical signaling. Science advances, 9(41), eadf0708.