Resource Summary Report

Generated by FDI Lab - SciCrunch.org on Apr 17, 2025

NIH Human Connectome Project

RRID:SCR_006942
Type: Tool

Proper Citation

NIH Human Connectome Project (RRID:SCR_006942)

Resource Information

URL: http://humanconnectome.org/consortia/

Proper Citation: NIH Human Connectome Project (RRID:SCR_006942)

Description: Project to map the neural pathways that underlie human brain function for several modalities of neuroimaging data including fMRI. The purpose of the Project is to acquire and share data about the structural and functional connectivity of the human brain. It will greatly advance the capabilities for imaging and analyzing brain connections, resulting in improved sensitivity, resolution, and utility, thereby accelerating progress in the emerging field of human connectomics. Altogether, the Human Connectome Project will lead to major advances in the understanding of what makes us uniquely human and will set the stage for future studies of abnormal brain circuits in many neurological and psychiatric disorders. The sixteen institutes and centers of the NIH Blueprint for Neuroscience have funded two major grants that will take complementary approaches to deciphering the brain's amazingly complex wiring diagram. An 11-institution consortium led by Washington University in St. Louis and the University of Minnesota received a 5-year grant to enable development and utilization of advanced Magnetic Resonance Imaging (MRI) methods to chart brain circuitry. A consortium led by Massachusetts General Hospital and the University of California at Los Angeles received a grant to enable building and refining a next-generation 3T MR scanner that improves the quality and spatial resolution with which brain connectivity data can be acquired at this field strength.

Abbreviations: HCP

Synonyms: Human Connectome Project, Human Connectome Project (HCP)

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

Keywords: brain, function, neural pathway, connectivity, human, community, data resource,

eeg, meg, electrocorticography, funding resource, hardware, imaging genomics, knowledge environment, magnetic resonance, software, fmri

Funding: NIH Blueprint for Neuroscience Research

Resource Name: NIH Human Connectome Project

Resource ID: SCR_006942

Alternate IDs: nlx_143921

Alternate URLs: http://www.nitrc.org/projects/hcp

Record Creation Time: 20220129T080239+0000

Record Last Update: 20250417T065258+0000

Ratings and Alerts

No rating or validation information has been found for NIH Human Connectome Project.

No alerts have been found for NIH Human Connectome Project.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 12 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Aganj I, et al. (2024) Automatic Geometry-based Estimation of the Locus Coeruleus Region on T1-Weighted Magnetic Resonance Images. bioRxiv : the preprint server for biology.

Aganj I, et al. (2024) Automatic geometry-based estimation of the locus coeruleus region on T1-weighted magnetic resonance images. Frontiers in neuroscience, 18, 1375530.

Wang Y, et al. (2024) Spatio-molecular profiles shape the human cerebellar hierarchy along the sensorimotor-association axis. Cell reports, 43(2), 113770.

Xia X, et al. (2021) Species and individual differences and connectional asymmetry of Broca's area in humans and macaques. NeuroImage, 244, 118583.

Conrin SD, et al. (2018) From Default Mode Network to the Basal Configuration: Sex Differences in the Resting-State Brain Connectivity as a Function of Age and Their Clinical

Correlates. Frontiers in psychiatry, 9, 365.

Preller KH, et al. (2018) Changes in global and thalamic brain connectivity in LSD-induced altered states of consciousness are attributable to the 5-HT2A receptor. eLife, 7.

Zhan L, et al. (2017) The significance of negative correlations in brain connectivity. The Journal of comparative neurology, 525(15), 3251.

Sporns O, et al. (2012) From simple graphs to the connectome: networks in neuroimaging. NeuroImage, 62(2), 881.

Van Essen DC, et al. (2012) The future of the human connectome. NeuroImage, 62(2), 1299.

U?urbil K, et al. (2012) The road to functional imaging and ultrahigh fields. NeuroImage, 62(2), 726.

Marcus DS, et al. (2011) Informatics and data mining tools and strategies for the human connectome project. Frontiers in neuroinformatics, 5, 4.

Feinberg DA, et al. (2010) Multiplexed echo planar imaging for sub-second whole brain FMRI and fast diffusion imaging. PloS one, 5(12), e15710.