Resource Summary Report

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COBRE

RRID:SCR_010482 Type: Tool

Proper Citation

COBRE (RRID:SCR_010482)

Resource Information

URL: http://fcon_1000.projects.nitrc.org/indi/retro/cobre.html

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Description: Data set of raw anatomical and functional MR data from 72 patients with Schizophrenia and 75 healthy controls (ages ranging from 18 to 65 in each group). All subjects were screened and excluded if they had: history of neurological disorder, history of mental retardation, history of severe head trauma with more than 5 minutes loss of consciousness, history of substance abuse or dependence within the last 12 months. Diagnostic information was collected using the Structured Clinical Interview used for DSM Disorders (SCID). A multi-echo MPRAGE (MEMPR) sequence was used with the following parameters: TR/TE/TI = 2530/(1.64, 3.5, 5.36, 7.22, 9.08)/900 ms, flip angle = 7??, FOV = 256x256 mm, Slab thickness = 176 mm, Matrix = 256x256x176, Voxel size =1x1x1 mm, Number of echos = 5, Pixel bandwidth =650 Hz, Total scan time = 6 min. With 5 echoes, the TR, TI and time to encode partitions for the MEMPR are similar to that of a conventional MPRAGE, resulting in similar GM/WM/CSF contrast. Rest data was collected with singleshot full k-space echo-planar imaging (EPI) with ramp sampling correction using the intercomissural line (AC-PC) as a reference (TR: 2 s, TE: 29 ms, matrix size: 64x64, 32 slices, voxel size: 3x3x4 mm3). Slice Acquisition Order: Rest scan - collected in the Axial plane - series ascending - multi slice mode - interleaved MPRAGE - collected in the Sag plane - series interleaved - multi slice mode - single shot The following data are released for every participant: * Resting fMRI * Anatomical MRI * Phenotypic data for every participant including: gender, age, handedness and diagnostic information.

Abbreviations: COBRE

Synonyms: Center for Biomedical Research Excellence, Center for Biomedical Research Excellence (COBRE)

Resource Type: data set, data or information resource

Keywords: resting fmri, anatomical mri, phenotype, gender, age, handedness, diagnosis, adult human, fmri, mri, neuroimaging, mental state assessment, clinical

Related Condition: Schizophrenia, Normal control, Aging

Funding: NCRR 1P20RR021938-01A2

Availability: Creative Commons Attribution-NonCommercial License, Account required

Resource Name: COBRE

Resource ID: SCR_010482

Alternate IDs: nlx_157762

Record Creation Time: 20220129T080259+0000

Record Last Update: 20250519T205145+0000

Ratings and Alerts

No rating or validation information has been found for COBRE.

No alerts have been found for COBRE.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 94 mentions in open access literature.

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

Iqbal Z, et al. (2025) Explainable Self-Supervised Dynamic Neuroimaging Using Time Reversal. Brain sciences, 15(1).

Yao S, et al. (2025) Connecting genomic results for psychiatric disorders to human brain cell types and regions reveals convergence with functional connectivity. Nature communications, 16(1), 395.

Zhao C, et al. (2024) Cross-cohort replicable resting-state functional connectivity in predicting symptoms and cognition of schizophrenia. Human brain mapping, 45(7), e26694.

Ji Y, et al. (2024) Exploring functional dysconnectivity in schizophrenia: alterations in eigenvector centrality mapping and insights into related genes from transcriptional profiles. Schizophrenia (Heidelberg, Germany), 10(1), 37.

Sastry NC, et al. (2024) Dynamicity of brain network organization & their community architecture as characterizing features for classification of common mental disorders from whole-brain connectome. Translational psychiatry, 14(1), 268.

Alahmadi A, et al. (2024) The hidden link: Investigating functional connectivity of rarely explored sub-regions of thalamus and superior temporal gyrus in Schizophrenia. Translational neuroscience, 15(1), 20220356.

Xing Y, et al. (2024) More reliable biomarkers and more accurate prediction for mental disorders using a label-noise filtering-based dimensional prediction method. iScience, 27(3), 109319.

Soleimani N, et al. (2024) Unraveling the Neural Landscape of Mental Disorders using Double Functional Independent Primitives (dFIPs). bioRxiv : the preprint server for biology.

Dilmore AH, et al. (2024) Medication Use is Associated with Distinct Microbial Features in Anxiety and Depression. bioRxiv : the preprint server for biology.

Ding C, et al. (2024) Mapping Brain Synergy Dysfunction in Schizophrenia: Understanding Individual Differences and Underlying Molecular Mechanisms. Advanced science (Weinheim, Baden-Wurttemberg, Germany), 11(32), e2400929.

Daulagala AC, et al. (2024) The epithelial adherens junction component PLEKHA7 regulates ECM remodeling and cell behavior through miRNA-mediated regulation of MMP1 and LOX. bioRxiv : the preprint server for biology.

Garland MM, et al. (2024) A randomized controlled safety and feasibility trial of floatation-REST in anxious and depressed individuals. PloS one, 19(6), e0286899.

Metzner C, et al. (2024) Exploring global and local processes underlying alterations in resting-state functional connectivity and dynamics in schizophrenia. Frontiers in psychiatry, 15, 1352641.

Thalhammer M, et al. (2024) Distinct Volume Alterations of Thalamic Nuclei Across the Schizophrenia Spectrum. Schizophrenia bulletin, 50(5), 1208.

Popov P, et al. (2024) A simple but tough-to-beat baseline for fMRI time-series classification. NeuroImage, 303, 120909.

Bi Y, et al. (2024) A multimodal vision transformer for interpretable fusion of functional and structural neuroimaging data. Human brain mapping, 45(17), e26783.

Jiang Y, et al. (2024) Neuroimaging epicenters as potential sites of onset of the neuroanatomical pathology in schizophrenia. Science advances, 10(24), eadk6063.

Joo SW, et al. (2024) Topological abnormalities of the morphometric similarity network of the cerebral cortex in schizophrenia. Schizophrenia (Heidelberg, Germany), 10(1), 57.

Schaller MD, et al. (2024) Efficacy of Centers of Biomedical Research Excellence (CoBRE) Grants to Build Research Capacity in Underrepresented States. bioRxiv : the preprint server for biology.

Nie W, et al. (2024) A three-classification model for identifying migraine with right-to-left shunt using lateralization of functional connectivity and brain network topology: a resting-state fMRI study. Frontiers in neuroscience, 18, 1488193.