Resource Summary Report

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MIRIAD

RRID:SCR_002422
Type: Tool

Proper Citation

MIRIAD (RRID:SCR_002422)

Resource Information

URL: http://miriad.drc.ion.ucl.ac.uk/

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Description: A database of volumetric MRI brain-scans of 46 Alzheimer's sufferers and 23 healthy elderly people. Many scans were collected of each participant at intervals from 2 weeks to 2 years, the study was designed to investigate the feasibility of using MRI as an outcome measure for clinical trials of Alzheimer's treatments. It includes a total of 708 scans and should be of particular interest for work on longitudinal biomarkers and image analysis.

Abbreviations: MIRIAD

Synonyms: MIRIAD dataset, MIRIAD XNAT database, MIRIAD database, Minimal Interval Resonance Imaging in Alzheimer's Disease, Minimal Interval Resonance Imaging in Alzheimer's Disease - public dataset

Resource Type: database, data or information resource

Defining Citation: PMID:23274184

Keywords: magnetic resonance, late adult human, longitudinal, mri, mini mental state examination, FASEB list

Related Condition: Alzheimer's disease, Healthy, Late adult human

Funding: UK Alzheimers Society ;
GlaxoSmithKline ;
MRC MR/J014257/1;
EPSRC EP/H046410/1 ;
Comprehensive Biomedical Research Centre Strategic Investment Award Ref. 168 ;

National Institute for Health Research

Availability: MIRIAD Data Use Agreement, Account required, Acknowledgement required

Resource Name: MIRIAD

Resource ID: SCR_002422

Alternate IDs: nlx_155795

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

Record Creation Time: 20220129T080213+0000

Record Last Update: 20250403T060206+0000

Ratings and Alerts

No rating or validation information has been found for MIRIAD.

No alerts have been found for MIRIAD.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 46 mentions in open access literature.

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

Hassan N, et al. (2024) Residual-Based Multi-Stage Deep Learning Framework for Computer-Aided Alzheimer's Disease Detection. Journal of imaging, 10(6).

Leonardsen EH, et al. (2024) Constructing personalized characterizations of structural brain aberrations in patients with dementia using explainable artificial intelligence. NPJ digital medicine, 7(1), 110.

Thulasimani V, et al. (2024) A Review of Datasets, Optimization Strategies, and Learning Algorithms for Analyzing Alzheimer's Dementia Detection. Neuropsychiatric disease and treatment, 20, 2203.

Downie Ruiz Velasco A, et al. (2024) MicroRNA biogenesis is broadly disrupted by inhibition of the splicing factor SF3B1. Nucleic acids research, 52(15), 9210.

Simarro J, et al. (2024) A deep learning model for brain segmentation across pediatric and

adult populations. Scientific reports, 14(1), 11735.

Mercuri RLV, et al. (2023) Retro-miRs: novel and functional miRNAs originating from mRNA retrotransposition. Mobile DNA, 14(1), 12.

Zheng X, et al. (2023) Computer assisted diagnosis of Alzheimer's disease using statistical likelihood-ratio test. PloS one, 18(2), e0279574.

Graham NSN, et al. (2023) Distinct patterns of neurodegeneration after TBI and in Alzheimer's disease. Alzheimer's & dementia : the journal of the Alzheimer's Association, 19(7), 3065.

Coupé P, et al. (2023) Lifespan Neurodegeneration Of The Human Brain In Multiple Sclerosis. bioRxiv : the preprint server for biology.

Lamontagne-Caron R, et al. (2023) Predicting cognitive decline in a low-dimensional representation of brain morphology. Scientific reports, 13(1), 16793.

Baniasadi M, et al. (2023) DBSegment: Fast and robust segmentation of deep brain structures considering domain generalization. Human brain mapping, 44(2), 762.

Coupé P, et al. (2023) Lifespan neurodegeneration of the human brain in multiple sclerosis. Human brain mapping, 44(17), 5602.

Wang R, et al. (2022) Effects of microRNA-298 on APP and BACE1 translation differ according to cell type and 3'-UTR variation. Scientific reports, 12(1), 3074.

Henschel L, et al. (2022) FastSurferVINN: Building resolution-independence into deep learning segmentation methods-A solution for HighRes brain MRI. NeuroImage, 251, 118933.

Coupé P, et al. (2022) Hippocampal-amygdalo-ventricular atrophy score: Alzheimer disease detection using normative and pathological lifespan models. Human brain mapping, 43(10), 3270.

Pinaya WHL, et al. (2021) Using normative modelling to detect disease progression in mild cognitive impairment and Alzheimer's disease in a cross-sectional multi-cohort study. Scientific reports, 11(1), 15746.

Greve DN, et al. (2021) A deep learning toolbox for automatic segmentation of subcortical limbic structures from MRI images. NeuroImage, 244, 118610.

Potdar AA, et al. (2021) Altered Intestinal ACE2 Levels Are Associated With Inflammation, Severe Disease, and Response to Anti-Cytokine Therapy in Inflammatory Bowel Disease. Gastroenterology, 160(3), 809.

Folego G, et al. (2020) Alzheimer's Disease Detection Through Whole-Brain 3D-CNN MRI. Frontiers in bioengineering and biotechnology, 8, 534592.

Henschel L, et al. (2020) FastSurfer - A fast and accurate deep learning based neuroimaging

pipeline. NeuroImage, 219, 117012.