

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

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: Free, Available for download, Freely available

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: 20260808T190353+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 53 mentions in open access literature.

Listed below are recent publications. The full list is available at [SPARC SAWG](#) .

Casamitjana A, et al. (2025) USLR: An open-source tool for unbiased and smooth longitudinal registration of brain MRI. Medical image analysis, 105, 103662.

Coupé P, et al. (2025) Lifespan Tree of Brain Anatomy: Diagnostic Values for Motor and Cognitive Neurodegenerative Diseases. Human brain mapping, 46(13), e70336.

Abbas S, et al. (2025) Alzheimer's Disease Prediction Using Fisher Mantis Optimization and Hybrid Deep Learning Models. Diagnostics (Basel, Switzerland), 15(12).

Piot E, et al. (2025) Estimation of reference curves for brain atrophy and analysis of robustness to machine effects. Scientific reports, 15(1), 34585.

Mashhadi N, et al. (2025) A multi-modal graph-based framework for Alzheimer's disease detection. Scientific reports, 15(1), 22684.

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.

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

Zhang X, et al. (2024) Improved neural network with multi-task learning for Alzheimer's disease classification. *Heliyon*, 10(4), e26405.

Simarro J, et al. (2024) A deep learning model for brain segmentation across pediatric and adult populations. *Scientific reports*, 14(1), 11735.

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.

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.

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

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

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.

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

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

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.