

Resource Summary Report

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Harvard - Oxford Cortical Structural Atlas

RRID:SCR_001476

Type: Tool

Proper Citation

Harvard - Oxford Cortical Structural Atlas (RRID:SCR_001476)

Resource Information

URL: <http://fsl.fmrib.ox.ac.uk/fsl/fslwiki/Atlases>

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Description: Probabilistic atlases covering 48 cortical and 21 subcortical structural areas, derived from structural data and segmentations kindly provided by the Harvard Center for Morphometric Analysis. T1-weighted images of 21 healthy male and 16 healthy female subjects (ages 18-50) were individually segmented by the CMA using semi-automated tools developed in-house. The T1-weighted images were affine-registered to MNI152 space using FLIRT (FSL), and the transforms then applied to the individual labels. Finally, these were combined across subjects to form population probability maps for each label. Segmentations used to create these atlases were provided by: David Kennedy and Christian Haselgrove, Centre for Morphometric Analysis, Harvard; Bruce Fischl, the Martinos Center for Biomedical Imaging, MGH; Janis Breeze and Jean Frazier from the Child and Adolescent Neuropsychiatric Research Program, Cambridge Health Alliance; Larry Seidman and Jill Goldstein from the Department of Psychiatry of Harvard Medical School.

Abbreviations: Atlases

Synonyms: , Harvard Oxford Cortical Structural Atlas, Harvard-Oxford cortical and subcortical structural atlases, Harvard Oxford Atlas

Resource Type: atlas, reference atlas, data or information resource

Keywords: male, female, t1-weighted image, cortical, subcortical, neuroanatomy, cortex

Related Condition: Healthy

Funding: NCRR R01 RR16594-01A1;
NIMH K01 MH01798;
NINDS R01 NS052585-01;
NIMH K08 MH01573

Availability: Free, Freely available

Resource Name: Harvard - Oxford Cortical Structural Atlas

Resource ID: SCR_001476

Alternate IDs: nlx_152707

License: FSL License

Record Creation Time: 20220129T080207+0000

Record Last Update: 20260727T040259+0000

Ratings and Alerts

No rating or validation information has been found for Harvard - Oxford Cortical Structural Atlas.

No alerts have been found for Harvard - Oxford Cortical Structural Atlas.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 144 mentions in open access literature.

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

Momeni A, et al. (2026) Cognitive modes underlying attentional control deficits in schizophrenia: A functional magnetic resonance imaging (fMRI) study. Psychiatry research. Neuroimaging, 356, 112105.

Islam SR, et al. (2025) Vision Transformer Autoencoders for Unsupervised Representation Learning: Capturing Local and Non-Local Features in Brain Imaging to Reveal Genetic Associations. medRxiv : the preprint server for health sciences.

Liu B, et al. (2025) Object knowledge representation in the human visual cortex requires a connection with the language system. PLoS biology, 23(5), e3003161.

Ding W, et al. (2025) Model-based and model-free valuation signals in the human brain vary markedly in their relationship to individual differences in behavioral control. bioRxiv : the preprint server for biology.

Widegren E, et al. (2025) Fear extinction retention in children, adolescents, and adults. Developmental cognitive neuroscience, 71, 101509.

Taylor JL, et al. (2025) Network-targeted transcranial magnetic stimulation (TMS) for mild cognitive impairment (MCI). Neurolmage. Clinical, 47, 103819.

Flannery JS, et al. (2025) Developmental changes in dopamine-related neurophysiology and associations with adolescent substance use and incentive-boosted cognitive control. *Developmental cognitive neuroscience*, 75, 101594.

Escalante ES, et al. (2025) Differences in risk appraisal and neural activity in adolescents with a history of misconduct. *Social cognitive and affective neuroscience*, 20(1).

Chong Chie JAK, et al. (2025) Neurometabolic and vascular dysfunction as an early diagnostic for Alzheimer's disease and related dementias. *Alzheimer's & dementia : the journal of the Alzheimer's Association*, 21(11), e70790.

Evensmoen HR, et al. (2025) Pattern integration and differentiation: Dual process model of episodic memory. *Imaging neuroscience (Cambridge, Mass.)*, 3.

Holton E, et al. (2025) Disentangling the Component Processes in Complex Planning Impairments Following Ventromedial Prefrontal Lesions. *The Journal of neuroscience : the official journal of the Society for Neuroscience*, 45(12).

Zhu JD, et al. (2025) Mapping Genetic Associations With Functional Brain Area Alterations in Schizophrenia and Implications for Cortical Development. *Brain and behavior*, 15(7), e70688.

Harrington MO, et al. (2025) Memory control deficits in the sleep-deprived human brain. *Proceedings of the National Academy of Sciences of the United States of America*, 122(1), e2400743122.

Wang J, et al. (2025) Function-Specific Localization in the Supplementary Motor Area: A Potential Effective Target for Tourette Syndrome. *CNS neuroscience & therapeutics*, 31(2), e70280.

Chong Chie JAK, et al. (2025) Multiscale Metabolic Covariance Networks Uncover Stage-Specific Biomarker Signatures Across the Alzheimer's Disease Continuum. *bioRxiv : the preprint server for biology*.

Beaumier AS, et al. (2025) Strengthening the Aging Brain: Functional Connectivity Changes After a Language-Based Cognitive Program. *Brain sciences*, 15(11).

Kenyon KH, et al. (2024) Volumetric and diffusion MRI abnormalities associated with dysarthria in multiple sclerosis. *Brain communications*, 6(3), fcae177.

Cao YB, et al. (2024) Neurite orientation dispersion and density imaging quantifies microstructural impairment in the thalamus and its connectivity in amyotrophic lateral sclerosis. *CNS neuroscience & therapeutics*, 30(2), e14616.

Fernández de Gamarra-Oca L, et al. (2024) Amygdala structure and function and its associations with social-emotional outcomes in a low-risk preterm sample. *Brain structure & function*, 229(2), 477.

Kopal J, et al. (2024) Using rare genetic mutations to revisit structural brain asymmetry. *Nature communications*, 15(1), 2639.