

Resource Summary Report

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TractoR: Tractography with R

RRID:SCR_002602

Type: Tool

Proper Citation

TractoR: Tractography with R (RRID:SCR_002602)

Resource Information

URL: <http://www.tractor-mri.org.uk/>

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Description: Software application that includes R packages for reading, writing and visualising magnetic resonance images stored in Analyze, NIfTI and DICOM file formats (DICOM support is read only). It also contains functions specifically designed for working with diffusion MRI and tractography, including a standard implementation of the neighbourhood tractography approach to white matter tract segmentation. A shell script is also provided to run experiments with TractoR without interacting with R.

Abbreviations: TractoR

Synonyms: Tractography with R

Resource Type: software resource, software application, data processing software, data visualization software

Keywords: analyze, atlas application, c, dicom, linux, macos, modeling, magnetic resonance, nifti, other unix-like, posix/unix-like, quantification, r, segmentation, sh, bash, statistical operation, tractography, unix shell, visualization, diffusion mri

Availability: Free, Available for download, Freely available

Resource Name: TractoR: Tractography with R

Resource ID: SCR_002602

Alternate IDs: nlx_156005

Alternate URLs: <http://www.nitrc.org/projects/tractor>

License: GNU General Public License v2

Record Creation Time: 20220129T080214+0000

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Ratings and Alerts

No rating or validation information has been found for TractoR: Tractography with R.

No alerts have been found for TractoR: Tractography with R.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 28 mentions in open access literature.

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

Jochems ACC, et al. (2025) Longitudinal Cognitive Changes in Cerebral Small Vessel Disease: The Effect of White Matter Hyperintensity Regression and Progression. *Neurology*, 104(4), e213323.

Baranyi G, et al. (2024) Life-course neighbourhood deprivation and brain structure in older adults: the Lothian Birth Cohort 1936. *Molecular psychiatry*, 29(11), 3483.

Jochems ACC, et al. (2024) Magnetic Resonance Imaging Tissue Signatures Associated With White Matter Changes Due to Sporadic Cerebral Small Vessel Disease Indicate That White Matter Hyperintensities Can Regress. *Journal of the American Heart Association*, 13(3), e032259.

Lapidaire W, et al. (2024) Increased white matter fibre dispersion and lower IQ scores in adults born preterm. *Human brain mapping*, 45(1), e26545.

Baranyi G, et al. (2023) Life-course neighbourhood deprivation and brain structure in older adults: The Lothian Birth Cohort 1936. *medRxiv : the preprint server for health sciences*.

Meijboom R, et al. (2022) Rationale and design of the brain magnetic resonance imaging protocol for FutureMS: a longitudinal multi-centre study of newly diagnosed patients with relapsing-remitting multiple sclerosis in Scotland. *Wellcome open research*, 7, 94.

Alves-Pinto A, et al. (2021) Effects of Piano Training in Unilateral Cerebral Palsy Using Probabilistic and Deterministic Tractography: A Case Report. *Frontiers in human neuroscience*, 15, 622082.

Buchanan CR, et al. (2021) Comparison of structural MRI brain measures between 1.5 and 3 T: Data from the Lothian Birth Cohort 1936. *Human brain mapping*, 42(12), 3905.

Wheater E, et al. (2021) Birth weight is associated with brain tissue volumes seven decades later but not with MRI markers of brain ageing. *NeuroImage. Clinical*, 31, 102776.

Charalambous T, et al. (2020) Disrupted principal network organisation in multiple sclerosis relates to disability. *Scientific reports*, 10(1), 3620.

Harris SE, et al. (2020) Neurology-related protein biomarkers are associated with cognitive ability and brain volume in older age. *Nature communications*, 11(1), 800.

Deary IJ, et al. (2019) Brain Peak Width of Skeletonized Mean Diffusivity (PSMD) and Cognitive Function in Later Life. *Frontiers in psychiatry*, 10, 524.

Booth T, et al. (2019) Reaction time variability and brain white matter integrity. *Neuropsychology*, 33(5), 642.

Sparrow SA, et al. (2018) Diffusion MRI parameters of corpus callosum and corticospinal tract in neonates: Comparison between region-of-interest and whole tract averaged measurements. *European journal of paediatric neurology : EJPN : official journal of the European Paediatric Neurology Society*, 22(5), 807.

Cox SR, et al. (2018) Longitudinal serum S100 β and brain aging in the Lothian Birth Cohort 1936. *Neurobiology of aging*, 69, 274.

Alloza C, et al. (2018) Polygenic risk score for schizophrenia and structural brain connectivity in older age: A longitudinal connectome and tractography study. *NeuroImage*, 183, 884.

Moore E, et al. (2017) Diffusion tensor MRI tractography reveals increased fractional anisotropy (FA) in arcuate fasciculus following music-cued motor training. *Brain and cognition*, 116, 40.

Hoffman P, et al. (2017) Brain grey and white matter predictors of verbal ability traits in older age: The Lothian Birth Cohort 1936. *NeuroImage*, 156, 394.

Ritchie SJ, et al. (2017) Risk and protective factors for structural brain ageing in the eighth decade of life. *Brain structure & function*, 222(8), 3477.

Lewis GJ, et al. (2016) Trait conscientiousness and the personality meta-trait stability are associated with regional white matter microstructure. *Social cognitive and affective neuroscience*, 11(8), 1255.