

Resource Summary Report

Generated by [PRECISE-TBI](#) on Jul 28, 2026

Functional Connectivity Toolbox

RRID:SCR_006394

Type: Tool

Proper Citation

Functional Connectivity Toolbox (RRID:SCR_006394)

Resource Information

URL: <https://sites.google.com/site/functionalconnectivitytoolbox/>

Proper Citation: Functional Connectivity Toolbox (RRID:SCR_006394)

Description: MATLAB toolbox for performing functional connectivity analyses includes many of the most commonly-used approaches researchers have utilized to date for the identification of condition-dependent functional interactions between fMRI time-series obtained from two or more brain regions. The approaches are either bivariate or multivariate methods defined in time or frequency domains that emphasize distinct features of relationships among the time-series.

Abbreviations: Functional Connectivity Toolbox

Resource Type: software application, data analysis software, software resource, data processing software, software toolkit

Defining Citation: [PMID:19520177](#)

Keywords: functional connectivity, fmri, matlab, brain region, brain, function, connectivity, neuroimaging, time-series

Funding: NIMH K25 MH076981-01;
NSF DMS-0904825;
NIMH MH074807;
NIMH MH082998

Availability: Free

Resource Name: Functional Connectivity Toolbox

Resource ID: SCR_006394

Alternate IDs: nlx_152228

Record Creation Time: 20220129T080235+0000

Record Last Update: 20260729T044133+0000

Ratings and Alerts

No rating or validation information has been found for Functional Connectivity Toolbox.

No alerts have been found for Functional Connectivity Toolbox.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 239 mentions in open access literature.

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

Park IH, et al. (2025) Cognitive effort devaluation and the salience network: a computational model of amotivation in depression. *Frontiers in psychiatry*, 16, 1581802.

Wang H, et al. (2025) Brain changes in stroke patients during rehabilitation: a longitudinal study. *Frontiers in neuroscience*, 19, 1636135.

Rosenberg BM, et al. (2025) Previous institutionalization is associated with elevated functional connectivity between the nucleus accumbens and amygdala during aversive learning. *Developmental cognitive neuroscience*, 76, 101617.

Nair KS, et al. (2025) Improvement in Insulin Sensitivity Prevents Decline in Glucose Uptake, Functional Connectivity, and Volume in the Insulin Resistant Human Brain. *Research square*.

Shibata M, et al. (2025) Alterations of the default mode network, salience network, and frontoparietal network in non-problematic Internet use and their association with mood regulation: from an internet literacy perspective. *Frontiers in neuroscience*, 19, 1599987.

Tuna T, et al. (2025) Associative coding of conditioned fear in the thalamic nucleus reuniens in rodents and humans. *Communications biology*, 8(1), 1142.

Rosenberg BM, et al. (2025) Functional connectivity between the nucleus accumbens and amygdala underlies avoidance learning during adolescence: Implications for developmental psychopathology. *Development and psychopathology*, 37(4), 1833.

Zhang K, et al. (2025) Brain plasticity associated with prolonged shooting training: a multimodal neuroimaging investigation from a cross-sectional study. *Frontiers in human neuroscience*, 19, 1530642.

- Zhao H, et al. (2025) Amplitude of low-frequency fluctuations in classical trigeminal neuralgia patients with purely paroxysmal and concomitant continuous pain. *Frontiers in pain research (Lausanne, Switzerland)*, 6, 1523845.
- Kicik A, et al. (2025) Impact of amygdala functional connectivity on cognitive impairment in Alzheimer's disease. *Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology*, 46(6), 2601.
- Chen VC, et al. (2025) Longitudinal analysis of brain functional connectivity and its association with clinical assessment in depressed patients using resting state fMRI. *Scientific reports*, 15(1), 24750.
- Wang J, et al. (2025) Aberrant functional connectivity between the retrosplenial cortex and hippocampal subregions in amnesic mild cognitive impairment and Alzheimer's disease. *Brain communications*, 7(1), fcae476.
- Funghi G, et al. (2025) Mental State Recognition Deficits Linked to Brain Changes in Parkinson's Disease Without Dementia. *The European journal of neuroscience*, 61(4), e70014.
- Jiang L, et al. (2025) MR-guided focused ultrasound thalamotomy modulates cerebello-thalamo-cortical tremor network in essential tremor patients. *Frontiers in neurology*, 16, 1526501.
- Horowitz-Kraus T, et al. (2025) Cognitive and Neurobiological Correlates for Switching/Inhibition Moderate the Relations Between Word Reading and Reading Comprehension in Hebrew-Speaking Children: An fMRI Study. *Dyslexia (Chichester, England)*, 31(1), e1798.
- Monti DA, et al. (2025) Changes in brain functional connectivity associated with transcutaneous auricular vagus nerve stimulation in healthy controls. *Frontiers in human neuroscience*, 19, 1531123.
- Li L, et al. (2025) The relationship between the APOE genotypes and memory performance of young adults and its neural basis. *Scientific reports*, 15(1), 25150.
- Tuna T, et al. (2025) Associative coding of conditioned fear in the thalamic nucleus reuniens in rodents and humans. *bioRxiv : the preprint server for biology*.
- Kicik A, et al. (2025) Investigation of symptom-specific functional connectivity patterns in Parkinson's disease. *Neurological sciences : official journal of the Italian Neurological Society and of the Italian Society of Clinical Neurophysiology*, 46(9), 4385.
- Cara C, et al. (2025) Prenatal brain connectivity and postnatal language: how familial risk and prenatal speech exposure shape early language skills. *Scientific reports*, 15(1), 33281.