

Resource Summary Report

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Functional Network Connectivity (FNC)

RRID:SCR_015731

Type: Tool

Proper Citation

Functional Network Connectivity (FNC) (RRID:SCR_015731)

Resource Information

URL: <https://trendscenter.org/software/>

Proper Citation: Functional Network Connectivity (FNC) (RRID:SCR_015731)

Description: Software toolbox which finds and displays temporal relations amongst components. This can help determine causal relations in the brain.

Abbreviations: FNC

Synonyms: FNC Toolbox, GIFT toolbox, Functional Network Connectivity Toolbox

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

Defining Citation: [PMID:18082428](#)

Keywords: fmri, temporal relation, causal relation, neural connectivity,

Availability: Free, Available for download, Tutorial available

Resource Name: Functional Network Connectivity (FNC)

Resource ID: SCR_015731

Old URLs: <http://mialab.mrn.org/software/fnc/index.html>

Record Creation Time: 20220129T080327+0000

Record Last Update: 20260728T043510+0000

Ratings and Alerts

No rating or validation information has been found for Functional Network Connectivity (FNC).

No alerts have been found for Functional Network Connectivity (FNC).

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 16 mentions in open access literature.

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

Sendi M, et al. (2025) Dynamic Brain Age Modeling Identifies Network-Specific Cognitive Deficits in Schizophrenia. Research square.

Bakiaj R, et al. (2025) Unmasking the Dark Triad: A Data Fusion Machine Learning Approach to Characterize the Neural Bases of Narcissistic, Machiavellian and Psychopathic Traits. The European journal of neuroscience, 61(2), e16674.

Duda M, et al. (2025) Functionally Adaptive Structural Basis Sets of the Brain: A Dynamic Fusion Approach. Human brain mapping, 46(11), e70302.

Zhu Y, et al. (2024) Abnormal Functional Connectivity Intra- and Inter-Network in Resting-State Brain Networks of Patients with Toothache. Journal of pain research, 17, 2111.

Tu Y, et al. (2024) Relationship between brain white matter damage and grey matter atrophy in hereditary spastic paraplegia types 4 and 5. European journal of neurology, 31(8), e16310.

Sendi M, et al. (2024) Brain dynamics reflecting an intra-network brain state is associated with increased posttraumatic stress symptoms in the early aftermath of trauma. Research square.

Moser DA, et al. (2023) Within-network brain connectivity during a social optimism task is related to personal optimism and optimism for in-group members. Human brain mapping, 44(12), 4561.

Zhang H, et al. (2022) Changes in the Intranetwork and Internetwork Connectivity of the Default Mode Network and Olfactory Network in Patients with COVID-19 and Olfactory Dysfunction. Brain sciences, 12(4).

Bezmaternykh DD, et al. (2021) Brain Networks Connectivity in Mild to Moderate Depression: Resting State fMRI Study with Implications to Nonpharmacological Treatment. Neural plasticity, 2021, 8846097.

Kumar R, et al. (2021) Ground-truth "resting-state" signal provides data-driven estimation and correction for scanner distortion of fMRI time-series dynamics. NeuroImage, 227,

117584.

Zhou C, et al. (2020) Structural Covariance Network Disruption and Functional Compensation in Parkinson's Disease. *Frontiers in aging neuroscience*, 12, 199.

Shi Y, et al. (2020) Multi-channel hierarchy functional integration analysis between large-scale brain networks for migraine: An fMRI study. *NeuroImage. Clinical*, 28, 102462.

Ning Y, et al. (2018) The altered Granger causality connection among pain-related brain networks in migraine. *Medicine*, 97(10), e0102.

Dong X, et al. (2018) Rest but busy: Aberrant resting-state functional connectivity of triple network model in insomnia. *Brain and behavior*, 8(2), e00876.

Thomann AK, et al. (2017) Intrinsic neural network dysfunction in quiescent Crohn's Disease. *Scientific reports*, 7(1), 11579.

Wolf RC, et al. (2012) Default-mode network changes in preclinical Huntington's disease. *Experimental neurology*, 237(1), 191.