Resource Summary Report

Generated by Kravitz on Sep 10, 2026

C-PAC

RRID:SCR_000862
Type: Tool

Proper Citation

C-PAC (RRID:SCR_000862)

Resource Information

URL: http://fcp-indi.github.io

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Description: A configurable, open-source, Nipype-based, automated processing pipeline for resting state functional MRI (R-fMRI) data, for use by both novice and expert users. C-PAC was designed to bring the power, flexibility and elegance of the Nipype platform to users in a plug and play fashion?without requiring the ability to program. Using an easy to read, text-editable configuration file, C-PAC can rapidly orchestrate automated R-fMRI processing procedures, including: - quality assurance measurements - image preprocessing based upon user specified preferences - generation of functional connectivity maps (e.g., correlation analyses) - customizable extraction of time-series data - generation of local R-fMRI metrics (e.g., regional homogeneity, voxel-matched homotopic connectivity, fALFF/ALFF) C-PAC makes it possible to use a single configuration file to launch a factorial number of pipelines differing with respect to specific processing steps.

Abbreviations: C-PAC

Synonyms: Configurable Pipeline for the Analysis of Connectomes

Resource Type: data processing software, image analysis data, software application, software resource, workflow software

Keywords: computational neuroscience, connectivity analysis, macos, magnetic resonance, nifti, nipype, posix/unix-like, python, workflow, resting state functional mri, fmri

Availability: Open source

Resource Name: C-PAC

Resource ID: SCR_000862

Alternate IDs: nlx_155720

Alternate URLs: http://www.nitrc.org/projects/cpac

License: MIT License, X Consortium License

Record Creation Time: 20220129T080204+0000

Record Last Update: 20260905T132426+0000

Ratings and Alerts

No rating or validation information has been found for C-PAC.

No alerts have been found for C-PAC.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at Kravitz .

Germani E, et al. (2025) Predicting Parkinson's disease trajectory using clinical and functional MRI features: A reproduction and replication study. PloS one, 20(2), e0317566.

Shafiei G, et al. (2025) Reproducible Brain Charts: An open data resource for mapping brain development and its associations with mental health. Neuron.

McDonald AR, et al. (2017) The real-time fMRI neurofeedback based stratification of Default Network Regulation Neuroimaging data repository. NeuroImage, 146, 157.

Chen S, et al. (2017) Latent and Abnormal Functional Connectivity Circuits in Autism Spectrum Disorder. Frontiers in neuroscience, 11, 125.

Fresco DM, et al. (2017) Distinct Functional Connectivities Predict Clinical Response with Emotion Regulation Therapy. Frontiers in human neuroscience, 11, 86.

Savio AM, et al. (2017) Pypes: Workflows for Processing Multimodal Neuroimaging Data. Frontiers in neuroinformatics, 11, 25.

Koyama MS, et al. (2017) A Modulatory Effect of Brief Passive Exposure to Non-linguistic Sounds on Intrinsic Functional Connectivity: Relevance to Cognitive Performance. Cerebral cortex (New York, N.Y. : 1991), 27(12), 5817.

Gorgolewski KJ, et al. (2014) A correspondence between individual differences in the brain's intrinsic functional architecture and the content and form of self-generated thoughts. PloS one, 9(5), e97176.