**FreeSurfer**

**RRID:** SCR_001847  
**Type:** Tool

**Proper Citation**

FreeSurfer (RRID:SCR_001847)

**Resource Information**

**URL:** http://surfer.nmr.mgh.harvard.edu/  
**Proper Citation:** FreeSurfer (RRID:SCR_001847)

**Description:** Open source software suite for processing and analyzing human brain MRI images. Used for reconstruction of brain cortical surface from structural MRI data, and overlay of functional MRI data onto reconstructed surface. Contains automatic structural imaging stream for processing cross sectional and longitudinal data. Provides anatomical analysis tools, including: representation of cortical surface between white and gray matter, representation of the pial surface, segmentation of white matter from rest of brain, skull stripping, B1 bias field correction, nonlinear registration of cortical surface of individual with stereotaxic atlas, labeling of regions of cortical surface, statistical analysis of group morphometry differences, and labeling of subcortical brain structures. Operating System: Linux, macOS.

**Abbreviations:** FreeSurfer

**Resource Type:** data visualization software, software application, image analysis software, data processing software, software resource

**Defining Citation:** PMID:22248573

**Keywords:** processing, analysis, human, brain, MRI, image, reconstruction, cortical, surface, fMRI, data

**Funding Agency:** NCRR, NINDS, NCRR

**Availability:** Free, Available for download, Freely available
Resource Name: FreeSurfer
Resource ID: SCR_001847
Alternate IDs: nif-0000-00304
Record Creation Time: 20220129T080209+0000
Record Last Update: 20240702T053104+0000

Ratings and Alerts

- 4.5 / 5 (21 votes) Rated at NITRC http://www.nitrc.org/projects/freesurfer
No alerts have been found for FreeSurfer.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 9987 mentions in open access literature.

Listed below are recent publications. The full list is available at FDI Lab - SciCrunch.org.

Kennedy B, et al. (2024) A previously undescribed scene-selective site is the key to encoding ego-motion in naturalistic environments. Research square.

Demidenko MI, et al. (2024) A multi-sample evaluation of the measurement structure and function of the modified monetary incentive delay task in adolescents. Developmental cognitive neuroscience, 65, 101337.

Heukamp NJ, et al. (2024) Adolescents' pain-related ontogeny shares a neural basis with adults' chronic pain in basothalamo-cortical organization. iScience, 27(2), 108954.


Karr JE, et al. (2024) Detecting cognitive decline in high-functioning older adults: The relationship between subjective cognitive concerns, frequency of high neuropsychological

Kennedy B, et al. (2024) A previously undescribed scene-selective site is the key to encoding ego-motion in naturalistic environments. eLife, 13.


Zhang M, et al. (2024) Integrating TSPO PET imaging and transcriptomics to unveil the role of neuroinflammation and amyloid-β deposition in Alzheimer's disease. European journal of nuclear medicine and molecular imaging, 51(2), 455.


Ragone E, et al. (2024) Modular subgraphs in large-scale connectomes underpin spontaneous co-fluctuation events in mouse and human brains. Communications biology, 7(1), 126.