Resource Summary Report

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CRL Unbiased and Deformable Spatiotemporal Atlas of the Fetal Brain

RRID:SCR 014176

Type: Tool

Proper Citation

CRL Unbiased and Deformable Spatiotemporal Atlas of the Fetal Brain (RRID:SCR_014176)

Resource Information

URL: http://www.nitrc.org/projects/crl_fetal_atlas

Proper Citation: CRL Unbiased and Deformable Spatiotemporal Atlas of the Fetal Brain (RRID:SCR_014176)

Description: An atlas of of the fetal brain from MRI of normal fetuses scanned prenatally generated using a mathematical framework. The atlas shows the inter-subject anatomic variability of the fetal brain over the fetal brain growth period and is currently available between 27 weeks gestational age to 35 weeks. It has been constructed following an unbiased minimum distance template estimation approach which utilizes symmetric diffeomorphic deformation and the cross-correlation (CC) similarity metric integrated with kernel regression in age.

Synonyms: Computational Radiology Laboratory Unbiased and Deformable Spatiotemporal Atlas of the Fetal Brain

Resource Type: atlas, data or information resource

Defining Citation: PMID:25485391

Keywords: atlas, fetal brain, mri, fetal brain growth, normal fetus

Funding:

Availability: Available to the research community

Resource Name: CRL Unbiased and Deformable Spatiotemporal Atlas of the Fetal Brain

Resource ID: SCR_014176

Alternate URLs: http://crl.med.harvard.edu/research/fetal_brain_atlas/

License: Open Software License 3.0

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Ratings and Alerts

No rating or validation information has been found for CRL Unbiased and Deformable Spatiotemporal Atlas of the Fetal Brain.

No alerts have been found for CRL Unbiased and Deformable Spatiotemporal Atlas of the Fetal Brain.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 7 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Calixto C, et al. (2025) White Matter Tract Crossing and Bottleneck Regions in the Fetal Brain. Human brain mapping, 46(1), e70132.

Calixto C, et al. (2024) A detailed spatio-temporal atlas of the white matter tracts for the fetal brain. bioRxiv: the preprint server for biology.

Ciceri T, et al. (2024) Fetal gestational age prediction via shape descriptors of cortical development. Frontiers in pediatrics, 12, 1471080.

Calixto C, et al. (2024) Anatomically constrained tractography of the fetal brain. NeuroImage, 297, 120723.

Mallela AN, et al. (2023) Heterogeneous growth of the insula shapes the human brain. Proceedings of the National Academy of Sciences of the United States of America, 120(24), e2220200120.

Fidon L, et al. (2021) A spatio-temporal atlas of the developing fetal brain with spina bifida aperta. Open research Europe, 1, 123.

Turk E, et al. (2019) Functional Connectome of the Fetal Brain. The Journal of neuroscience : the official journal of the Society for Neuroscience, 39(49), 9716.