

Resource Summary Report

Generated by PRECISE-TBI on Sep 7, 2026

Optseq

RRID:SCR_014363

Type: Tool

Proper Citation

Optseq (RRID:SCR_014363)

Resource Information

URL: <http://surfer.nmr.mgh.harvard.edu/optseq/>

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Description: Software tool for automatically scheduling events for rapid-presentation event-related (RPER) fMRI experiments (the schedule is the order and timing of events). Events in RPER are presented closely enough in time that their hemodynamic responses will overlap. This requires that the onset times of the events be jittered in order to remove the overlap from the estimate of the hemodynamic response. RPER is highly resistant to habituation, expectation, and set because the subject does not know when the next stimulus will appear or which stimulus type it will be.

Synonyms: Optseq2, Optseq - fMRI Event Scheduler

Resource Type: data acquisition software, data processing software, software application, software resource, standalone software

Keywords: fmri, scheduling event, event, rper, hemodynamic response, stimulus, stochastic design

Availability: Available for download

Resource Name: Optseq

Resource ID: SCR_014363

Alternate IDs: SCR_005976, nlx_151349

Alternate URLs: <http://www.nitrc.org/projects/optseq>

Record Creation Time: 20220129T080320+0000

Record Last Update: 20260905T132746+0000

Ratings and Alerts

No rating or validation information has been found for Optseq.

No alerts have been found for Optseq.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 341 mentions in open access literature.

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

Sawyer KS, et al. (2026) Alcohol Cues Elicit Differences in Brain Activation Patterns of Abstinent Men and Women with Alcohol Use Disorders. *Neuropsychiatric disease and treatment*, 22, 551536.

Suárez-Pellicioni M, et al. (2026) The association between longitudinal changes in inter-hemispheric IPS functional connectivity and math gains depends on children's age and task requirements. *Developmental cognitive neuroscience*, 78, 101666.

Guo L, et al. (2026) A neural network for modeling human concept formation, understanding and communication. *Nature computational science*, 6(5), 497.

Elliott BL, et al. (2026) Prior novelty invigorates future mesolimbic target detection. *Proceedings of the National Academy of Sciences of the United States of America*, 123(2), e2500436123.

Dumitrescu AM, et al. (2025) Investigating the Spatio-Temporal Signatures of Language Control-Related Brain Synchronization Processes. *Human brain mapping*, 46(2), e70109.

Avery JA, et al. (2025) Automatic engagement of limbic and prefrontal networks in response to food images reflects distinct information about food hedonics and inhibitory control. *Communications biology*, 8(1), 270.

Dahl MJ, et al. (2025) Locus coeruleus-related insula activation supports implicit learning. *bioRxiv : the preprint server for biology*.

Dellert T, et al. (2025) Neural correlates of consciousness in an auditory no-report fMRI study. *Current biology : CB*, 35(23), 5721.

Fjell AM, et al. (2025) Stable hippocampal correlates of high episodic memory function across adulthood. *Scientific reports*, 15(1), 8816.

Kim J, et al. (2025) Sensitivity of the inferior frontal gyrus to morphological processing through the detection of category violation. *Scientific reports*, 15(1), 27675.

Feng G, et al. (2025) Brain Changes Following Two Reading Interventions in Chinese Children With Reading Disability. *Developmental science*, 28(4), e70038.

Ulrich M, et al. (2025) Indirect experiential grounding: semantic similarity of abstract scientific concepts is reflected in activity patterns in visual and motor cortex. *Scientific reports*, 15(1), 43814.

Toenders YJ, et al. (2024) Developing body estimation in adolescence is associated with neural regions that support self-concept. *Social cognitive and affective neuroscience*, 19(1).

Su X, et al. (2024) The Left Amygdala and Right Frontoparietal Cortex Support Emotional Adaptation Aftereffects. *Brain sciences*, 14(3).

Cho E, et al. (2024) Neural processing of prototypicality and simplicity of product design in forming design preferences. *PloS one*, 19(1), e0297148.

Martín-Signes M, et al. (2024) Integrating brain function and structure in the study of the human attentional networks: a functionnectome study. *Brain structure & function*, 229(7), 1665.

Yan X, et al. (2024) Reading disability is characterized by reduced print-speech convergence. *Child development*, 95(6), 1982.

Park H, et al. (2024) Involvement of the anterior insula and frontal operculum during wh-question comprehension of wh-in-situ Korean language. *PloS one*, 19(4), e0298740.

Chai XJ, et al. (2024) From vision to memory: How scene-sensitive regions support episodic memory formation during child development. *Developmental cognitive neuroscience*, 65, 101340.

Yan X, et al. (2024) Age-related changes in individuals with and without reading disability: Behavioral and fMRI evidence. *Imaging neuroscience (Cambridge, Mass.)*, 2.