Resource Summary Report

Generated by NIF on Aug 9, 2026

Swartz Center for Computational Neuroscience

RRID:SCR_001933
Type: Tool

Proper Citation

Swartz Center for Computational Neuroscience (RRID:SCR_001933)

Resource Information

URL: http://sccn.ucsd.edu/

Proper Citation: Swartz Center for Computational Neuroscience (RRID:SCR_001933)

Description: Computational neuroscience center that observes and models how functional activities in multiple brain areas interact dynamically to support human cognition, creativity and social interaction. Center research involves development computational methods and software, experimental methods and equipment, collection and analysis of human cognitive experiments, and collaborations to analyze data collected by other groups in such experiments. The Center has a 72-channel EEG recording system customized for use in the fMRI environment, and a very-high density Biosemi Active Two active-electrode EEG system, rapidly configurable either as a 256-channel system for a single subject or as two 136-channel systems for recording from two subjects simultaneously. In addition, UCSD now has a 306-channel MEG plus 128-channel EEG system (Neuromag/Elektra). Projects in the Center include studies of human cognitive processes including attention and memory, role of the anterior/posterior cingulate, time perception and emotional expression. Data acquisition includes high-density EEG, concurrent EEG and fMRI recording and analysis, and face video processing. Current analysis approaches include independent component and time-frequency analysis.

Abbreviations: SCCN

Synonyms: Swartz Center for Computational Neuroscience

Resource Type: data or information resource, portal, topical portal

Keywords: emotional expression, fmri, anterior cingulate, attention, brain, cognition, computational neuroscience, concurrent eeg, high-density eeg, human, memory, posterior cingulate, social interaction, software, time perception, video procession, job, eeg, cognitive process, creativity, independent component analysis, time-frequency analysis

Funding: Swartz Foundation

Resource Name: Swartz Center for Computational Neuroscience

Resource ID: SCR_001933

Alternate IDs: nif-0000-10509

Record Creation Time: 20220129T080210+0000

Record Last Update: 20260808T185736+0000

Ratings and Alerts

No rating or validation information has been found for Swartz Center for Computational Neuroscience.

No alerts have been found for Swartz Center for Computational Neuroscience.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 34 mentions in open access literature.

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

Zheng L, et al. (2026) Altered functional brain network in adolescents with non-suicidal self-injury: a resting-state EEG study. BMC psychiatry, 26(1).

Mathew AM, et al. (2026) Structure Influences Case Processing: Electrophysiological Insights from Hindi Light Verb Constructions. Brain sciences, 16(2).

Bianco R, et al. (2026) Human newborns form musical predictions based on rhythmic but not melodic structure. PLoS biology, 24(2), e3003600.

Veliks V, et al. (2026) Processing of different word list lengths during encoding and retrieval in Broca's area. Frontiers in human neuroscience, 20, 1757160.

Lei Z, et al. (2025) Brain temporal dynamics correlate with clinical traits, spontaneous arm movements, and recovery in middle cerebral artery stroke. Frontiers in human neuroscience, 19, 1617825.

Bai D, et al. (2025) Altering Temporal Dynamics of Sleepiness and Mood During Sleep Deprivation: Evidence from Resting-State EEG Microstates. Brain sciences, 15(4).

Zou Q, et al. (2025) Cortical hierarchy underlying homeostatic sleep pressure alleviation. Nature communications, 16(1), 10014.

Veliks V, et al. (2025) Effects of word list length during episodic memory encoding observation by the event-related potential and time-frequency. Frontiers in human

neuroscience, 19, 1542289.

Tan L, et al. (2024) Exploring brain network oscillations during seizures in drug-naïve patients with juvenile absence epilepsy. Frontiers in neurology, 15, 1340959.

Xiang C, et al. (2024) A resting-state EEG dataset for sleep deprivation. Scientific data, 11(1), 427.

Blümer M, et al. (2024) The Impact of Hearing Aids on Listening Effort and Listening-Related Fatigue - Investigations in a Virtual Realistic Listening Environment. Trends in hearing, 28, 23312165241265199.

Studnicki A, et al. (2023) Parieto-Occipital Electrocortical Dynamics during Real-World Table Tennis. eNeuro, 10(4).

Luo X, et al. (2023) The micro and macro interactions in acute autoimmune encephalitis: a study of resting-state EEG. Frontiers in neurology, 14, 1181629.

Subash P, et al. (2023) A comparison of neuroelectrophysiology databases. Scientific data, 10(1), 719.

Wang Y, et al. (2022) A test-retest resting, and cognitive state EEG dataset during multiple subject-driven states. Scientific data, 9(1), 566.

Khan AF, et al. (2022) Transient brain-wide coactivations and structured transitions revealed in hemodynamic imaging data. NeuroImage, 260, 119460.

Hao Z, et al. (2022) EEG Evidence Reveals Zolpidem-Related Alterations and Prognostic Value in Disorders of Consciousness. Frontiers in neuroscience, 16, 863016.

Zhou Y, et al. (2021) Altered EEG Brain Networks in Patients with Acute Peripheral Herpes Zoster. Journal of pain research, 14, 3429.

Duan H, et al. (2021) The effect of sleep deprivation on empathy for pain: An ERP study. Neuropsychologia, 163, 108084.

Duan W, et al. (2021) Reproducibility of power spectrum, functional connectivity and network construction in resting-state EEG. Journal of neuroscience methods, 348, 108985.