Resource Summary Report

Generated by RRID on Apr 8, 2025

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: topical portal, data or information resource, 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: 20250404T060056+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 24 mentions in open access literature.

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

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.

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

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

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

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

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

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

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

Wei HT, et al. (2021) Sensitivity of amplitude and phase based MEG measures of interhemispheric connectivity during unilateral finger movements. NeuroImage, 242, 118457.

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

Gupta R, et al. (2020) Modified Support Vector Machine for Detecting Stress Level Using EEG Signals. Computational intelligence and neuroscience, 2020, 8860841.

Wang YJ, et al. (2020) Impaired Coupling of the Brain's Default Network During Sleep Deprivation: A Resting-State EEG Study. Nature and science of sleep, 12, 937.

Tavano A, et al. (2019) A division of labor between power and phase coherence in encoding attention to stimulus streams. NeuroImage, 193, 146.

Cavanagh JF, et al. (2017) The Patient Repository for EEG Data + Computational Tools (PRED+CT). Frontiers in neuroinformatics, 11, 67.

Attaheri A, et al. (2015) EEG potentials associated with artificial grammar learning in the primate brain. Brain and language, 148, 74.

Žari? G, et al. (2015) Crossmodal deficit in dyslexic children: practice affects the neural timing of letter-speech sound integration. Frontiers in human neuroscience, 9, 369.

Nozaradan S, et al. (2012) Steady-state evoked potentials as an index of multisensory temporal binding. NeuroImage, 60(1), 21.

Li XQ, et al. (2012) How and when accentuation influences temporally selective attention and subsequent semantic processing during on-line spoken language comprehension: an ERP study. Neuropsychologia, 50(8), 1882.

Grandchamp R, et al. (2011) Single-trial normalization for event-related spectral decomposition reduces sensitivity to noisy trials. Frontiers in psychology, 2, 236.