



Weidong Cai

Clinical Assistant Professor, Psychiatry and Behavioral Sciences

Bio

ACADEMIC APPOINTMENTS

- Clinical Assistant Professor, Psychiatry and Behavioral Sciences

PROFESSIONAL EDUCATION

- Ph.D., State University of New York at Stony Brook
- M.S., Peking University
- B.S., Shanghai Jiao Tong University

Publications

PUBLICATIONS

- **Dysregulated Brain Dynamics in a Triple-Network Saliency Model of Schizophrenia and Its Relation to Psychosis.** *Biological psychiatry*
Supekar, K., Cai, W., Krishnadas, R., Palaniyappan, L., Menon, V.
2018
- **Dopamine-Related Dissociation of Cortical and Subcortical Brain Activations in Cognitively Unimpaired Parkinson's Disease Patients OFF and ON Medications.** *Neuropsychologia*
Kim, J., Zhang, K., Cai, W., YorkWilliams, S., I Ua Cruadhlaioich, M. A., Llanes, S., Menon, V., Poston, K. L.
2018
- **Uncovering hidden brain state dynamics that regulate performance and decision-making during cognition.** *Nature communications*
Taghia, J., Cai, W., Ryali, S., Kochalka, J., Nicholas, J., Chen, T., Menon, V.
2018; 9 (1): 2505
- **Aberrant Time-Varying Cross-Network Interactions in Children With Attention-Deficit/Hyperactivity Disorder and the Relation to Attention Deficits.** *Biological psychiatry. Cognitive neuroscience and neuroimaging*
Cai, W., Chen, T., Szegletes, L., Supekar, K., Menon, V.
2018; 3 (3): 263–73
- **Bayesian Switching Factor Analysis for Estimating Time-varying Functional Connectivity in fMRI.** *NeuroImage*
Taghia, J., Ryali, S., Chen, T., Supekar, K., Cai, W., Menon, V.
2017
- **Temporal Dynamics and Developmental Maturation of Saliency, Default and Central-Executive Network Interactions Revealed by Variational Bayes Hidden Markov Modeling** *PLOS COMPUTATIONAL BIOLOGY*
Ryali, S., Supekar, K., Chen, T., Kochalka, J., Cai, W., Nicholas, J., Padmanabhan, A., Menon, V.
2016; 12 (12)
- **Multivariate dynamical systems-based estimation of causal brain interactions in fMRI: Group-level validation using benchmark data, neurophysiological models and human connectome project data** *JOURNAL OF NEUROSCIENCE METHODS*

- Ryali, S., Chen, T., Supekar, K., Tu, T., Kochalka, J., Cai, W., Menon, V.
2016; 268: 142-153
- **Dissociable Fronto-Operculum-Insula Control Signals for Anticipation and Detection of Inhibitory Sensory Cue.** *Cerebral cortex*
Cai, W., Chen, T., Ide, J. S., Li, C. R., Menon, V.
2016: -?
 - **Distinct Global Brain Dynamics and Spatiotemporal Organization of the Salience Network** *PLOS BIOLOGY*
Chen, T., Cai, W., Ryali, S., Supekar, K., Menon, V.
2016; 14 (6)
 - **Causal Interactions Within a Frontal-Cingulate-Parietal Network During Cognitive Control: Convergent Evidence from a Multisite-Multitask Investigation.** *Cerebral cortex*
Cai, W., Chen, T., Ryali, S., Kochalka, J., Li, C. R., Menon, V.
2016; 26 (5): 2140-2153
 - **Compensatory neural mechanisms in cognitively unimpaired Parkinson disease.** *Annals of neurology*
Poston, K. L., YorkWilliams, S., Zhang, K., Cai, W., Everling, D., Tayim, F. M., Llanes, S., Menon, V.
2016; 79 (3): 448-463
 - **Development and validation of consensus clustering-based framework for brain segmentation using resting fMRI.** *Journal of neuroscience methods*
Ryali, S., Chen, T., Padmanabhan, A., Cai, W., Menon, V.
2015; 240: 128-140
 - **Evidence Supports Specific Braking Function for Inferior PFC.** *Trends in cognitive sciences*
Aron, A. R., Cai, W., Badre, D., Robbins, T. W.
2015
 - **Dissociable Roles of Right Inferior Frontal Cortex and Anterior Insula in Inhibitory Control: Evidence from Intrinsic and Task-Related Functional Parcellation, Connectivity, and Response Profile Analyses across Multiple Datasets** *JOURNAL OF NEUROSCIENCE*
Cai, W., Ryali, S., Chen, T., Li, C. R., Menon, V.
2014; 34 (44): 14652-14667
 - **Sensorimotor-independent prefrontal activity during response inhibition** *HUMAN BRAIN MAPPING*
Cai, W., Cannistraci, C. J., Gore, J. C., Leung, H.
2014; 35 (5): 2119-2136
 - **Proactive Selective Response Suppression Is Implemented via the Basal Ganglia** *JOURNAL OF NEUROSCIENCE*
Majid, D. S., Cai, W., Corey-Bloom, J., Aron, A. R.
2013; 33 (33): 13259-13269
 - **The role of the right presupplementary motor area in stopping action: two studies with event-related transcranial magnetic stimulation** *JOURNAL OF NEUROPHYSIOLOGY*
Cai, W., George, J. S., Verbruggen, F., Chambers, C. D., Aron, A. R.
2012; 108 (2): 380-389
 - **Stimulating deep cortical structures with the batwing coil: How to determine the intensity for transcranial magnetic stimulation using coil-cortex distance** *JOURNAL OF NEUROSCIENCE METHODS*
Cai, W., George, J. S., Chambers, C. D., Stokes, M. G., Verbruggen, F., Aron, A. R.
2012; 204 (2): 238-241
 - **Stopping speech suppresses the task-irrelevant hand** *BRAIN AND LANGUAGE*
Cai, W., Oldenkamp, C. L., Aron, A. R.
2012; 120 (3): 412-415
 - **Roles for the pre-supplementary motor area and the right inferior frontal gyrus in stopping action: Electrophysiological responses and functional and structural connectivity** *NEUROIMAGE*
Swann, N. C., Cai, W., Conner, C. R., Pieters, T. A., Claffey, M. P., George, J. S., Aron, A. R., Tandon, N.
2012; 59 (3): 2860-2870

- **Transcranial Magnetic Stimulation Reveals Dissociable Mechanisms for Global Versus Selective Corticomotor Suppression Underlying the Stopping of Action** *CEREBRAL CORTEX*
Majid, D. S., Cai, W., George, J. S., Verbruggen, F., Aron, A. R.
2012; 22 (2): 363-371
- **Rule-Guided Executive Control of Response Inhibition: Functional Topography of the Inferior Frontal Cortex** *PLOS ONE*
Cai, W., Leung, H.
2011; 6 (6)
- **A Proactive Mechanism for Selective Suppression of Response Tendencies** *JOURNAL OF NEUROSCIENCE*
Cai, W., Oldenkamp, C. L., Aron, A. R.
2011; 31 (16): 5965-5969
- **Deep Brain Stimulation of the Subthalamic Nucleus Alters the Cortical Profile of Response Inhibition in the Beta Frequency Band: A Scalp EEG Study in Parkinson's Disease** *JOURNAL OF NEUROSCIENCE*
Swann, N., Poizner, H., Houser, M., Gould, S., Greenhouse, I., Cai, W., Strunk, J., George, J., Aron, A. R.
2011; 31 (15): 5721-5729
- **Cortical activity during manual response inhibition guided by color and orientation cues** *BRAIN RESEARCH*
Cai, W., Leung, H.
2009; 1261: 20-28
- **Common and differential ventrolateral prefrontal activity during inhibition of hand and eye movements** *JOURNAL OF NEUROSCIENCE*
Leung, H., Cai, W.
2007; 27 (37): 9893-9900