

## Yi-Shin Sheu, Ph.D.

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### EDUCATION

The Johns Hopkins University, Baltimore, MD  
**Ph.D., Psychological and Brain Sciences** **2015**  
Dissertation: "Cognitive Control of Abstract Rules"

The Johns Hopkins University, Baltimore, MD  
**M.A., Psychological and Brain Sciences** **2011**  
Thesis: "Neuroplasticity Underlying Working Memory Networks:  
Evidence From ICA-Based fMRI Analysis in Patients with Multiple Sclerosis"

National Taiwan University, Taipei, Taiwan  
**B.S., Psychology** (Graduated on Dean's List) **2006**

### AWARDS AND HONORS

Taiwan Ministry of Education Scholarship (\$50,000 USD). **2009 – 2011**

### PROFESSIONAL EXPERIENCE

**Research Data Analyst II** March 2021 – Present  
Mid-Atlantic Permanente Research Institute  
Kaiser Permanente, Rockville, MD

**Postdoctoral Fellow** Oct 2015 – Oct 2021  
Department of Neurology, Cognitive Neuroscience Division  
Johns Hopkins University School of Medicine, Baltimore, MD

**Graduate Student Researcher** Sep 2009 – Sep 2015  
Psychological and Brain Sciences Program  
Johns Hopkins University, Baltimore, MD

**Research Specialist** June 2006 – April 2009  
Developmental Biopsychiatry Research Program  
McLean Hospital/Harvard Medical School, Belmont, MA

## TEACHING EXPERIENCE

**Guest lecturer**, Johns Hopkins University  
Cognitive Control, Fall 2011

**Graduate Instructor**, Johns Hopkins University  
Research Methods in Experimental Psychology, Spring 2012

**Teaching Assistant**, Johns Hopkins University  
Advanced Statistical Method, Fall 2011  
Law, Psychology, and Policy making, Fall 2014  
Physiological Psychology, Fall 2010  
Functional Human Neuroanatomy, Spring 2010

## SERVICE

Reviewer for Journals: *Neuroimage*, *The Cerebellum*, *Cortex*, *Current Opinion in Behavioral Sciences*.

Member, Editorial Board of Medical Medicine Monitor Journal (2021- current)

## PEER-REVIEWED PUBLICATIONS

Burrell, T.D., **Sheu, Y.S.**, Kim, S., Mohadikar, K., Ortiz, N., Jonas, C. Horberg, M.A. COVID-19 and Adolescent Outpatient Mental Health Service Utilization: an interrupted time series analysis. *Academic Pediatrics* (2023)

**Sheu, YS.**, Desmond, J.E. Cerebro-Cerebellar Response to Sequence Violation in a Cognitive Task: an fMRI Study. *Cerebellum* (2021).  
<https://doi.org/10.1007/s12311-021-01279-y>

Desmond, JE, Rice LC, Cheng DT, Hua J, Qin Q, Rilee JJ, Faulkner ML, **Sheu, Y.S.**, Mathena JR, Wand GS, McCaul ME (2020). Changes in hemodynamic response function resulting from chronic alcohol consumption. *Alcoholism: Clinical and Experimental Research* 44 (5), 1099-1111

Cheng, D.T., Rice, L.C., McCaul, M.E., Rilee, J.J., Faulkner M.L., **Sheu, Y.S.**, Mathena, J.R., Desmond, J.E. (2020). Neural substrates underlying eyeblink classical conditioning in adults with alcohol use disorders. *Alcoholism: Clinical and Experimental Research*.

**Sheu, Y.S.**, Yu, Liang, Desmond, J.E. (2019). Disruption of cerebellar prediction in verbal working memory. *Frontiers in Human Neuroscience* 13, 61

Peterburs, J, Blevins, L.C., **Sheu Y.S.**, Desmond, J.E. (2018). Cerebellar contributions to sequence prediction in verbal working memory. *Brain structure and function*, 1-15.

- Sheu, Y.S.** & Courtney, S.M. (2016). A neural mechanism of cognitive control for resolving conflict between abstract task rules. *Cortex*, 85, 13-24.
- Walsh, M, Montojo, C.A., **Sheu, Y.S.**, Marchette, S.A., Harrison, D.M., Newsome, S.D., Zhou, F., Shelton, A.L., Courtney, S.M. (2011) Object working memory performance depends on microstructure of the frontal-occipital fasciculus. *Brain connectivity* 1:317-329.
- Tomoda, A., **Sheu, Y.S.**, Rabi, K., Suzuki, H., Navalta, C.P., Polcari, A., Teicher, M. H. (2011) Exposure to parental verbal abuse is associated with increased gray matter volume in superior temporal gyrus. *Neuroimage* 54: S280-286.
- Sheu, Y.S.**, Polcari, A., Anderson, C.M., Teicher, M.H. (2010) Harsh corporal punishment is associated with increased T2 relaxation time in dopamine-rich regions. *Neuroimage* 53(2):412-419.
- Teicher, M.H., Samson, J.A., **Sheu, Y.S.**, Polcari, A., McGreenery, C.E. (2010) Hurtful words: association of exposure to peer verbal abuse with elevated psychiatric symptom scores and corpus callosum abnormalities. *The American journal of psychiatry* 167(12):1464-1471.
- Tomoda, A., Suzuki, H., Rabi, K., **Sheu, Y.S.**, Polcari, A., Teicher, M.H. (2009) Reduced prefrontal cortical gray matter volume in young adults exposed to harsh corporal punishment. *Neuroimage* 47: T66-71.

## PUBLISHED BOOK CHAPTERS

- Seraphin, S.B., Teicher, M.H., Rabi, K., **Sheu, Y.S.**, Andersen, S.L., Anderson, C.M., Choi, J., Tomoda, A. (2010). Ontogenetic perspectives on the neurobiological basis of psychopathology following abuse and neglect. In Worthman, C.M., Plotsky, P.M., Schechter, D.S., Cummings, C.A. (Eds.) *Formative Experiences* (p.p. 308-330). New York: Cambridge University Press
- Teicher, M.H., Rabi, K., **Sheu, Y.S.**, Seraphin, S.B., Andersen, S.L., Anderson, C.M., Choi, J., Tomoda, A. (2010). Neurobiology of childhood trauma and adversity. In Lanius, R.A., Vermetten, E., Pain, C. (Eds.) *The Impact of Early Life Trauma on Health and Disease* (p.p. 112-122). New York: Cambridge University Press

## CONFERENCE PROCEEDINGS & SYMPOSIUM TALK

- Sheu, Y. S.**, Liang, Y. Desmond, J. E. (2019). The effect of stimulus predictability on cerebro-cerebellar verbal working memory processing: An fMRI study. *Proceedings of society for neuroscience, the 50th Annual Meeting* (Chicago, USA)
- Sheu, Y. S.**, Liang, Y. Desmond, J. E. (2018). Transcranial magnetic stimulation of the right cerebellum impairs prediction of temporal order

of items in verbal working memory. Symposium talk presented at International Society for Behavioural Neuroscience (ISBN), Anchorage, USA

**Sheu, Y. S. & Courtney, S. M. (2014).** A conflict-specific cognitive control mechanism for task rules: switching between task rules and resolving rule conflicts. Proceedings of society for neuroscience, the 44<sup>th</sup> Annual Meeting (Washington DC, USA)

**Sheu, Y. S. & Courtney, S. M. (2013).** Testing the biased competition model of attention in the selection of abstract task rules. Proceedings of society for neuroscience, the 43<sup>th</sup> Annual Meeting (San Diego, USA)

**Sheu, Y. S., Montojo, C., Walsh, M, Courtney, S. M. (2010).** Altered prefrontal connectivity during spatial and object working memory performance in multiple sclerosis. Proceedings of the cognitive neuroscience society (CNS), Annual Meeting. (Montreal, Canada)

**Sheu, Y. S., Polcari, A., Teicher, M. H. (2008).** The effect of methylphenidate on functional connectivity of the default mode network. Proceedings of society for neuroscience, the 38<sup>th</sup> Annual Meeting. (Washington DC, USA)

## LANGUAGES

Mandarin Chinese – native

English – speak fluently and read/write with high proficiency

## MEMBERSHIPS

International Society for Behavioural Neuroscience  
Society for Neuroscience