

## 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 2022 – 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

Review Editor, Editorial Board of Frontiers Human Neuroscience (2024-)  
Review Editor, Editorial Board of Frontiers Neuroimaging (2024-)  
Member, Editorial Board of Medical Medicine Monitor Journal (2021-)  
Reviewer for Journals: Neuroimage, The Cerebellum, Cortex, Current Opinion  
in Behavioral Sciences.

## PEER-REVIEWED PUBLICATIONS

Jonas MC, Egan K, **Sheu YS**, McCarthy RJ, Horberg MA. Pride Medical at Capitol Hill: A New Lesbian, Gay, Bisexual, Transgender, Queer/Questioning plus (LGBTQ+) Patient Care Option at Kaiser Permanente Mid-Atlantic States. Healthcare. 2023 Oct 24;11(21):2816. doi: 10.3390/healthcare11212816.

Rice LC, Langan MT, Cheng DT, **Sheu YS**, Peterburs J, Hua J, Qin Q, Rilee JJ, Faulkner ML, Mathena JR, Munro CA, Wand GS, McCaul ME, Desmond JE. Disrupted executive cerebro-cerebellar functional connectivity in alcohol use disorder. Alcohol Clin Exp Res. 2024 Jan;48(1):33-47. doi: 10.1111/acer.15219. Epub 2023 Nov 14.

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, Y.S.**, 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, J.E., Rice L.C., Cheng D.T., Hua J., Qin Q., Rilee J.J., Faulkner M.L., **Sheu, Y.S.**, Mathena J.R., Wand G.S., McCaul M.E. (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

- Wenk KS., **Sheu YS.**, Kim S, Miller M (2023) Methotrexate Test Dose Use and Frequency of Laboratory Abnormalities in Patients Initiating Treatment. *Journal of the American Academy of Dermatology*, Vol 89, Issue 3, Page AB195
- Burrell T, **Sheu YS**, Kim S, Mohadikar K, Jonas C (2022) A digital intervention for adolescents with mental illness in a time of need (DIAMoNd Study) APHA 2022 Annual Meeting and Expo.
- 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