

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, M.C., **Sheu, Y.S.**, Wright, K., Peyton, L., Bishop, R.C., Basra, S., Sarwar, F., Winn, G. and Chesbrough, K., 2024. A care coordination program to support patients with hepatitis B virus at Kaiser Permanente Mid-Atlantic States. BMC Health Services Research, 24(1), p.482.
- 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, 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

- Berry, NC., **Sheu YS.**, Chesbrough KB., Vupputuri, S (2024) Rates and predictors of guideline-directed medical therapy among patients with heart failure with reduced ejection fraction in a large, integrated healthcare system. Heart Failure Society of America (HFSA) Annual scientific meeting.
- Jacobs, JB., **Sheu YS.**, Weinfield, NS. (2024) Trends and incidence of type 1 diabetes, type 2 diabetes, and prediabetes in children and teens through the COVID-19 pandemic: an interrupted time series analysis. Pediatric Academic Societies Annual scientific meeting
- Jacobs, JB., **Sheu YS.**, Kim, S., Hu H., Chesbrough, K., Bishop, C., Weinfield, NC. (2024) Risk factors for development of type 2 and prediabetes in children and teenagers during the COVID-19 pandemic. American Public Health Association (APHA) annual meeting.
- 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 44th 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 43th 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 38th 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