CURRICULUM VITAE

Haixia Zheng

Laureate Institute for Brain Research, 6655 S. Yale Ave. Tulsa, OK 74136
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CURRENT POSITION: Associate Investigator at Laureate Institute for Brain Research
Assistant Professor at University of Tulsa

EDUCATION

2015 – 2019	Shimane University, Faculty of Medicine, Izumo, Japan Ph.D. in Cognitive Neuroscience Dissertation: *An fMRI study examining the effects of Serotonin 1A receptor C-1019G polymorphism on brain functional connectivity* Supervisor: Shuhei Yamaguchi, M.D., Ph.D.
2012 - 2014	Shimane University, Faculty of Human Sciences, Matsue, Japan M.A. in Clinical Development Psychology
2004 - 2008	Fujian Medical University, Fuzhou, China B.A. in Psychology

POSITIONS AND EMPLOYMENT

2022.02~	Assistant Professor, University of Tulsa, Tulsa, OK, USA
2022.01~	Associate Investigator, Laureate Institute for Brain Research, Tulsa, OK, USA
2020-2021	Research Associate, Laureate Institute for Brain Research, Tulsa, OK, USA
2019-2020	Postdoctoral Research Associate, Laureate Institute for Brain Research, Tulsa, OK, USA
2018-2019	Junior Research Associate, RIKEN center for Advanced Intelligence Project, Tokyo, Japan.
2015-2018	Research Assistant, Department of Neurology, Shimane University, Izumo, Japan
2008-2011	Medicine representative of the central nervous system revenue Janssen Pharmaceutical of Johnson & Johnson, Fuzhou, Fujian, China
2007-2008	Clinical Assistant, Department of Psychiatry, Frist Affiliated Hospital of Fujian Medical University. Fuzhou, Fujian, China

PEER-REVIEWED PUBLICATIONS

Thomas M, Savitz J, Zhang Y, Burrows K, Smith R, Figueroa-Hall L, Kuplicki R, Khalsa SS, Taki Y, Teague TK, Irwin MR, Yeh FC, Paulus MP, **Zheng H*.** (2022): Elevated Systemic Inflammation Is Associated with Reduced Corticolimbic White Matter Integrity in Depression. *Life.* doi: 10.3390/life12010043 (*IF*=3.82)

Zheng H*, Ford BN, Kuplicki R, Burrows K, Hunt PW, Bodurka J, et al. (2021): Association between cytomegalovirus infection, reduced gray matter volume, and resting-state functional hypoconnectivity in major depressive disorder: a replication and extension. *Translational Psychiatry*. DOI: 10.1038/s41398-021-01558-6 (*IF*=6.22)

Zheng H*, Bergamino M, Ford BN, Kuplicki R, Yeh F, Bodurka J, et al. (2021): Replicable association between human cytomegalovirus infection and reduced white matter fractional anisotropy in major depressive disorder. *Neuropsychopharmacology*. DOI:10.1038/s41386-021-00971-1 (*IF*=7.85)

Burrows K, Stewart J, Kuplicki R, Figueroa-Hall L, Spechler P, **Zheng H**, et al. (2021): Elevated peripheral inflammation is associated with attenuated striatal reward anticipation in major depressive disorder. *Brain Behavior and Immunity*. DOI: 10.1016/j.bbi.2021.01.016. (*IF*=7.22)

Zheng H*, Ford BN, Bergamino M, Kuplicki R, Investigators T, Hunt PW, et al. (2020): A hidden menace? Cytomegalovirus infection is associated with reduced cortical gray matter volume in major depressive disorder. *Molecular Psychiatry*. DOI: 10.1038/s41380-020-00932-y (*IF*=15.99)

Zheng H*, Onoda K, Nagai A, Yamaguchi S. (2020). Reduced dynamic complexity of BOLD signals differentiates mild cognitive impairment from normal aging. *Frontiers in Aging Neuroscience*, 12(April):1-9, DOI: 10.3389/fnagi.2020.00090 (*IF*=5.75)

Zheng H*, Onoda K, Wada Y, Mitaki S, Nabika T, Yamaguchi S. (2017). Serotonin-1A receptor C-1019G polymorphism affects brain functional networks. *Scientific Reports*, 7(1), 12536. DOI:10.1038/s41598-017-12913-3 (*IF*=4.53)

Onoda K., Kawagoe T., **Zheng H.**, & Yamaguchi S. (2017). Theta band transcranial alternating current stimulation modulates network behavior of dorsal anterior cingulate cortex. *Scientific Reports*, *7*(1), 3607. DOI:10.1038/s41598-017-03859-7 (*IF*=4.53)

** Correspondence*
IF = Journal impact factor at time of acceptance

SELECTED CONFERENCE PRESENTATIONS

Zheng H., Smith R., Burrows k., Kuplicki R., Bodurka J., Teague T.K., Paulus M., Khalsa S., Savitz J. (2021.05.) Inflammation is Associated with Abnormal Interoceptive Processing in Major Depressive Disorder. Poster presented at the 2021 Society of Biological Psychiatry (SOBP) virtual conference

Zheng H., Onoda K., & Yamaguchi S. (2018.07). Detection of early mild cognitive impairment using Lasso and SVM: resting state fMRI study. Poster presented at the 41th Annual Meeting of the Japan Neuroscience Society, Kobe, Japan

Zheng H., Onoda K., Wada Y., Mitaki S., Nabika T., & Yamaguchi S. (2017.11). Resting-state fMRI reveals dopamine receptor D2 polymorphism influence on cognitive function in older healthy adults. Poster presented at the *Society for Neuroscience 47th Annual Meeting*, Washington, DC, United States.

Zheng H., Onoda K., Wada Y., Mitaki S., Nabika T., & Yamaguchi S. (2017.07). Serotonin-1A receptor C-1019G polymorphism affects brain functional networks. Poster presented at the 40th Annual Meeting of the Japan Neuroscience Society, Makuhari, Japan

Zheng H., Onoda K., Wada Y., Mitaki S., Nabika T., & Yamaguchi S. (2016.11). Serotonin-1A receptor polymorphism alters functional connectivity of default mode network. Poster presented at the Society for Neuroscience 46th Annual Meeting, San Diego, CA, United States.

Zheng H., Onoda K., Wada Y., Mitaki S., Nabika T., & Yamaguchi S. (2016.08). Genetic polymorphism influences on brain network efficiency of human resting state functional connectivity. Poster presented at the 11th ICME International Conference on Complex Medical Engineering, Tochigi, Japan.

RELATED SKILLS

Statistical Software: R, Matlab, SPSS

Supervised Machine Learning: Support Vector Machine (SVM), Neural Networks

Structural and Functional MRI Data Analysis

- Diffusion tensor imaging (DTI) and tractography: FSL, DSI-Studio
- Volumetric analysis (T1-weighted MRI data): FreeSurfer
- Task-based functional MRI data: AFNI
- Resting-state functional MRI data: Matlab, SPM, CONN, GIFT

Additional Neuroimaging Training Course:

- AFNI bootcamp (2020 March 2nd~6th)
- Diffusion MRI and tractography workshop (2019 Nov 20th~21st)
- Structural and functional brain connectivity course (2021 Oct 26th~28th)

HONORS AND AWARDS

2018~2019 Rotary Yoneyama Memorial Foundation Scholarship
(Award Amount: $15,000. Japan nationwide competitive award)

2018~2019 Traineeship in RIKEN center for Advanced Intelligence Project (AIP)
(Award Amount: $10,000. International competitive award)

2016~2018 Otsuka Toshimi Scholarship Foundation Graduate Research Scholarship
(Award Amount: $40,000. Japan nationwide competitive award)

2015~2019 Shimane University full four years tuition exemption, Shimane, Japan
(Award Amount: $25,000. University level competitive award)

GRANT SUPPORT

NIH/NIGMS P20 GM121312 PI: Martin Paulus 01/01/2021 - 12/31/2021
Neuroscience-based Mental Health Assessment and Prediction (NeuroMAP)
Pilot Project Title: Inflammation and Neurobehavioral Metrics of Interoceptive Processing in Depression
Role: Pilot Project PI Award Amount: $84,144 ($49,955 in direct costs)

CLINICAL EXPERIENCE

2015 – 2019 **Ph.D. student** in Department of Neurology, Faculty of Medicine, Shimane University. Izumo, Japan
Attended weekly conferences and meetings related to neurological disease including Alzheimer's disease, epilepsy, and stroke.

2008 – 2011 **Medicine Representative**, Xi'an Janssen Pharmaceutical Co.,Ltd, Fuzhou, China
Focused on the medicinal treatment of depression and anxiety, including presenting new research finding as well as antidepressant products to doctors and nurses. Organized and attended psychiatry related conferences and meetings. Helped psychiatrists organize patient education.

2007 – 2008 **Clinical Internship**, Department of Psychiatry, Frist Affiliated Hospital of Fujian Medical University. Fuzhou, China
Focused on learning about the diagnosis and treatment of mental disorders such as schizophrenia, depression, and anxiety.

OTHER EXPERIENCE AND PROFESSIONAL MEMBERSHIPS

2015-Present Member, Society for Neuroscience (SfN)
2016-Present Member, International Conference on Complex Medical Engineering (ICME)

2019-Present	Member, Society for Biological Psychiatry (SOBP)
2019-Present.	Member, Organization for Human Brain Mapping (OHBM)
2019-Present	Ad-hoc Reviewer: Neuropharmacology, Molecular Psychiatry, Journal of Affective Disorders
2020	Guest Lecturer, Department of Biological Science, University of Tulsa, Tulsa, OK "Introduction to Functional Magnetic Resonance Imaging and Diffusion Tensor Imaging"
2021	Invited Talk at University of Oklahoma, Tulsa, OK "Inflammation may influence interoceptive processing in major depressive disorder"