

CURRICULUM VITAE

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Masataka Wada MD

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Birth Date: June. 22. 1990

Birth Place: Tokyo, Japan

Sex: male

Citizenship: Japan

Undergraduate education

Apr/2009-Mar/2015 Keio University, School of Medicine, Tokyo, Japan

A listing of all appointments

Apr/2015-May/2017 Resident doctor: Keio University Hospital

Apr/2017-Jun/2020 Clinical Fellow: Keio University Hospital

Apr/2019-May/2023 Ph.D. course: Psychiatry, Keio University, School of Medicine

Apr/2023-present Clinical Fellow: Keio University Hospital

Educational History

Mar/2015 M.D., Keio University, School of Medicine

Mar/2023 Ph.D., Keio University, School of Medicine

A listing of medical license

May/2015-present Japanese Medical Doctor's License

Oct/2022-present Designated Psychiatrist of Japanese Mental Health and Welfare
Law

Feb/2023-present Certified Psychiatrist of Japanese Society of Psychiatry and
Neurology

Memberships in Professional and Scientific Societies

Apr/2018	Japanese Society of Psychiatry and Neurology
Apr/2018	International College of Neuropsychopharmacology
Jun/2018	Japanese Society of Sleep Research
Oct/2018	Japanese Society of Clinical Neuropsychopharmacology
Apr/2019	Society of Biological Psychiatry

Awards and Honors

2018 CINP's (International College of Neuropsychopharmacology) Best Poster Award

2018 JSBP's (Japanese Society of Biological Psychiatry) Excellent Presentation Award

2019 SOBP's (Society of Biological Psychiatry) Travel Award

2020 APA's (American Psychiatric Association) Junior Investigators, Fellowship Award

2020 JSCNP's (Japanese Society of Clinical Neuropsychopharmacology) Paul Janssen award
(As a co-author for the first authors of Drs. Ryosuke Tarumi and Sakiko Tsugawa)

2021 JSMD's (Japanese Society of Mood Disorders) Encouragement Award

2022 Excellent Presentation Award, Research Day of Department of Neuropsychiatry, Keio University School of Medicine

2022 JSBP's (Japanese Society of Biological Psychiatry) Young Investigators Award

2023 JSBP's (Japanese Society of Biological Psychiatry) Young Investigators Award

Major research interests

Neuromodulation for psychiatric disorders

Publications

Refereed Articles (in English)

1. **Wada M**, Mimura M, Noda Y, Takasu S, Plitman E, Honda M, Natsubori A, Ogyu K, Tarumi R, Graff-Guerrero A, Nakajima S. Neuroimaging Correlates of Narcolepsy with cataplexy: A Systematic Review. *Neurosci Res.* 2019 May;142:16-29.
2. Ogyu K, Kubo K, Noda Y, Iwata Y, Tsugawa S, Omura Y, **Wada M**, Tarumi R, Plitman E, Moriguchi S, Miyazaki T, Uchida H, Graff-Guerrero A, Mimura M, Nakajima S: Kynurenine Pathway in Depression: A Systematic Review and Meta-analysis. *Neurosci Biobehav Rev.* 2018 Jul;90:16-25.
3. **Wada M**, Noda Y, Shinagawa S, Chung JK, Sawada K, Ogyu K, Tarumi K, Tsugawa S, Miyazaki T, Yamagata B, Graff-Guerrero A, Mimura M, Nakajima S: Effect of education on Alzheimer's disease-related neuroimaging biomarkers in healthy controls, and participants with mild cognitive impairment and Alzheimer's disease - a cross-sectional study. *J Alzheimers Dis.* 2018;63(2):861-869.

4. Iimori T, Nakajima S, Miyazaki T, Tarumi R, Ogyu K, **Wada M**, Tsugawa S, Masuda F, Daskalakis ZJ, Blumberger DM, Mimura M, Noda Y. Effectiveness of the prefrontal repetitive transcranial magnetic stimulation on cognitive profiles in depression, schizophrenia, and Alzheimer's disease: a systematic review. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019 Jan 10;88:31-40.
5. Moriguchi S, Takamiya A, Noda Y, Horita N, **Wada M**, Tsugawa S, Plitman E, Sano Y, Tarumi R, ElSalhy M, Katayama N, Ogyu K, Miyazaki T, Kishimoto T, Graff-Guerrero A, Meyer JH, Blumberger DM, Daskalakis ZJ, Mimura M, Nakajima S. Glutamatergic Neurometabolite Levels in Major Depressive Disorder: A Systematic Review and Meta-analysis of Proton Magnetic Resonance Spectroscopy Studies. *Mol Psychiatry*. 2019 Jul;24(7):952-964
6. Masuda F, Nakajima S, Miyazaki T, Tarumi R, Ogyu K, **Wada M**, Tsugawa S, Croarkin PE, Mimura M, Noda Y. Clinical effectiveness of repetitive transcranial magnetic stimulation treatment in children and adolescents with neurodevelopmental disorders: A systematic review. *Autism*. 2019 Jan 20:1362361318822502.
7. Masuda F, Nakajima S, Miyazaki T, Yoshida K, Tsugawa S, **Wada M**, Ogyu K, Croarkin PE, Blumberger DM, Daskalakis ZJ, Mimura M, Noda Y. Motor cortex excitability and inhibitory imbalance in autism spectrum disorder assessed with transcranial magnetic stimulation: a systematic review. *Transl Psychiatry*. 2019 Mar 7;9(1):110.
8. Sado M, **Wada M**, Ninomiya A, Nohara H, Kosugi T, Arai M, Endo R, Mimura M. Does the rapid response of an antidepressant contribute to better cost-effectiveness? Comparison between mirtazapine and SSRIs for first-line treatment of depression in Japan. *Psychiatry Clin Neurosci*. 2019 Apr 11.
9. Tsugawa S, Noda Y, Tarumi R, Mimura Y, Yoshida K, Iwata Y, Elsalhy M, Kuromiya M, Kurose S, Masuda F, Morita S, Ogyu K, Plitman E, **Wada M**, Miyazaki T, Graff-Guerrero A, Mimura M, Nakajima S. Glutathione levels and activities of glutathione metabolism enzymes in patients with schizophrenia: A systematic review and meta-analysis. *J Psychopharmacol*. 2019 Apr 30:269881119845820.
10. Tazawa Y, **Wada M**, Mitsukura Y, Takamiya A, Kitazawa M, Yoshimura M, Mimura M, Kishimoto T. Actigraphy for evaluation of mood disorders: A systematic review and meta-analysis. *J Affect Disord*. 2019 Apr 22;253:257-269.
11. **Wada M**, Kurose S, Miyazaki T, Nakajima S, Masuda F, Mimura Y, Nishida H, Ogyu K, Tsugawa S, Mashima Y, Plitman E, Chakravarty MM, Mimura M, Noda Y. The P300 event-related potential in bipolar disorder: A systematic review and meta-analysis. *J Affect Disord*. 2019 Jun 4;256:234-249.
12. Noda Y, Barr MS, ElSalhy M, Masuda F, Tarumi R, Ogyu K, **Wada M**, Tsugawa S, Miyazaki T, Nakajima S, Mimura M. Neural correlates of delay discount alterations in addiction and

- psychiatric disorders: A systematic review of magnetic resonance imaging studies. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019 Nov 18;109822.
13. Tarumi R, Tsugawa S, Noda Y, Plitman E, Honda S, Matsushita K, Chavez S, Sawada K, **Wada M**, Matsui M, Fujii S, Miyazaki T, Chakravarty MM, Uchida H, Remington G, Graff-Guerrero A, Mimura M, Nakajima S. Levels of glutamatergic neurometabolites in patients with severe treatment-resistant schizophrenia: a proton magnetic resonance spectroscopy study. *Neuropsychopharmacology*. 2020 Mar;45(4):632-640.
 14. Ochi R, Noda N, Tsuchimoto S, Tarumi R, Honda S, Matsushita K, Tsugawa S, Plitman E, Masuda F, Ogyu K, **Wada M**, Miyazaki T, Fujii S, Chakravarty MM, Graff-Guerrero A, Uchida H, Mimura M, Nakajima S. White matter microstructural organizations in patients with severe treatment-resistant schizophrenia: A diffusion tensor imaging study. *Prog Neuropsychopharmacol Biol Psychiatry*. 2020 Jun 8;100:109871.
 15. Ogyu K, Noda Y, Yoshida K, Kurose S, Masuda F, Mimura Y, Nishida H, Plitman E, Tarumi R, Tsugawa S, **Wada M**, Miyazaki T, Uchida H, Graff-Guerrero A, Mimura M, Nakajima S. Early improvements of individual symptoms as a predictor of treatment response to asenapine in patients with schizophrenia. *Neuropsychopharmacol Rep*. 2020 Jun;40(2):138-149.
 16. Takahashi T, Tsugawa S, Nakajima S, Plitman E, Chakravarty MM, Masuda F, **Wada M**, Kurose S, Ochi R, Matsushita K, Sasabayashi D, Nakamura M, Nishikawa Y, Takayanagi Y, Nishiyama S, Higuchi Y, Mizukami Y, Furuichi A, Kido M, Hashimoto R, Noguchi K, Fujii S, Mimura M, Noda Y, Suzuki M. Thalamic and striato-pallidal volumes in schizophrenia patients and individuals at risk for psychosis: A multi-atlas segmentation study. *Schizophr Res*. 2020 May 21;S0920-9964(20)30223-1.
 17. **Wada M**, Nakajima S, Tarumi R, Masuda F, Miyazaki T, Tsugawa S, Ogyu K, Honda S, Matsushita K, Kikuchi Y, Fujii S, Blumberger DM, Daskalakis ZJ, Mimura M, Noda Y. Resting-State Isolated Effective Connectivity of the Cingulate Cortex as a Neurophysiological Biomarker in Patients with Severe Treatment-Resistant Schizophrenia. *J Pers Med*. 2020 Aug 14;10(3):89.
 18. Hazumi M, Ito W, Okubo R, **Wada M**, Honda M. Development and validation of the hypersomnia-specific beliefs scale. *Sleep Med*. 2020 Nov;75:256-262.
 19. Kinjo M, **Wada M**, Nakajima S, Tsugawa S, Nakahara T, Blumberger DM, Mimura M, Noda Y. Transcranial magnetic stimulation neurophysiology of patients with major depressive disorder: a systematic review and meta-analysis. *Psychol Med*. 2020 Dec 3;1-10.
 20. Mimura Y, Nishida H, Nakajima S, Tsugawa S, Morita S, Yoshida K, Tarumi R, Ogyu K, **Wada M**, Kurose S, Miyazaki T, Blumberger DM, Daskalakis ZJ, Chen R, Mimura M, Noda Y. Neurophysiological biomarkers using transcranial magnetic stimulation in Alzheimer's

- disease and mild cognitive impairment: A systematic review and meta-analysis. *Neurosci Biobehav Rev.* 2020 Dec 8;121:47-59.
21. Honda M, Kimura S, Sasaki K, **Wada M**, Ito W. Evaluation of pathological sleepiness by Multiple Sleep Latency Test and 24-hour polysomnography in patients suspected of idiopathic hypersomnia. *Psychiatry Clin Neurosci.* 2021 Apr;75(4):149-151.
 22. Ohi K, Ochi R, Noda Y, **Wada M**, Sugiyama S, Nishi A, Shioiri T, Mimura M, Nakajima S. Polygenic risk scores for major psychiatric and neurodevelopmental disorders contribute to sleep disturbance in childhood: Adolescent Brain Cognitive Development (ABCD) Study. *Transl Psychiatry.* 2021 Mar 26;11(1):187.
 23. Li X, Honda S, Nakajima S, **Wada M**, Yoshida K, Daskalakis ZJ, Mimura M, Noda Y. TMS-EEG Research to Elucidate the Pathophysiological Neural Bases in Patients with Schizophrenia: A Systematic Review. *J Pers Med.* 2021 May 10;11(5):388.
 24. Yamada Y, Miyahara R, **Wada M**, Ninomiya A, Kosugi T, Mimura M, Sado M. A comparison of cost-effectiveness between offering antidepressant-CBT combinations first or second, for moderate to severe depression in Japan. *J Affect Disord.* 2021 Sep 1;292:574-582.
 25. Noda Y, Takano M, Hayano M, Li X, **Wada M**, Nakajima S, Mimura M, Kondo S, Tsubota K. Photobiological Neuromodulation of Resting-State EEG and Steady-State Visual-Evoked Potentials by 40 Hz Violet Light Optical Stimulation in Healthy Individuals. *J Pers Med.* 2021 Jun 15;11(6):557.
 26. Honda M, Kimura S, Sasaki K, Wada M, Ito W. Absence of multiple sleep-onset rapid eye movement periods (SOREMPs) is not a specific feature of patients with pathological sleep prolongation. *Sleep Biol Rhythms.* 2021 Sep 25;20(1):107-114. doi: 10.1007/s41105-021-00346-5. eCollection 2022 Jan.
 27. Arai N, Nakanishi T, Nakajima S, Li X, **Wada M**, Daskalakis ZJ, Goodman MS, Blumberger DM, Mimura M, Noda Y. Insights of neurophysiology on unconscious state using combined transcranial magnetic stimulation and electroencephalography: A systematic review. *Neurosci Biobehav Rev* (IF: 8.99; Q1). 2021 Dec;131:293-312.
 28. Nakahara T, Tsugawa S, Noda Y, Ueno F, Honda S, Kinjo M, Segawa H, Hondo N, Mori Y, Watanabe H, Nakahara K, Yoshida K, **Wada M**, Tarumi R, Iwata Y, Plitman E, Moriguchi S, de la Fuente-Sandoval C, Uchida H, Mimura M, Graff-Guerrero A, Nakajima S. Glutamatergic and GABAergic metabolite levels in schizophrenia-spectrum disorders: a meta-analysis of 1H-magnetic resonance spectroscopy studies. *Mol Psychiatry.* 2022 Jan;27(1):744-757.
 29. **Wada M**, Noda Y, Iwata Y, Tsugawa S, Yoshida K, Tani H, Hirano Y, Koike S, Sasabayashi D, Katayama H, Plitman E, Ohi K, Ueno F, Caravaggio F, Koizumi T, Gerretsen P, Suzuki T, Uchida H, Müller DJ, Mimura M, Remington G, Grace AA, Graff-Guerrero A, Nakajima S.

- Dopaminergic dysfunction and excitatory/inhibitory imbalance in treatment-resistant schizophrenia and novel neuromodulatory treatment. *Mol Psychiatry*. 2022 Jul 8;16:933622.
30. Yatomi T, Uchida T, Takamiya A, **Wada M**, Kudo S, Nakajima K, Nishida H, Yamagata B, Mimura M, Hirano J. Impact of Sevoflurane and Thiopental Used Over the Course of Electroconvulsive Therapy: Propensity Score Matching Analysis. *Front Hum Neurosci*. 2022 Jul 8;16:933622.
 31. **Wada M**, Nakajima S, Honda S, Takano M, Taniguchi K, Tsugawa S, Mimura Y, Hattori N, Koike S, Zomorodi R, Blumberger DM, Daskalakis ZJ, Mimura M, Noda Y. Reduced signal propagation elicited by frontal transcranial magnetic stimulation is associated with oligodendrocyte abnormalities in treatment-resistant depression. *J Psychiatry Neurosci*. 2022 Sep 14;47(5):E325-E335.
 32. Takano M, **Wada M**, Zomorodi R, Taniguchi K, Li X, Honda S, Tobari Y, Mimura Y, Nakajima S, Kitahata R, Mimura M, Daskalakis ZJ, Blumberger DM, Noda Y. Investigation of Spatiotemporal Profiles of Single-Pulse TMS-Evoked Potentials with Active Stimulation Compared with a Novel Sham Condition. *Biosensors (Basel)*. 2022 Oct 1;12(10):814.
 33. Ogyu K, Matsushita K, Honda S, **Wada M**, Tamura S, Takenouchi K, Tobari Y, Kusudo K, Kato H, Koizumi T, Arai N, Koreki A, Matsui M, Uchida H, Fujii S, Onaya M, Hirano Y, Mimura M, Nakajima S, Noda Y. Decrease in gamma-band auditory steady-state response in patients with treatment-resistant schizophrenia. *Schizophr Res*. 2023 Feb;252:129-137.
 34. **Wada M**, Yasuda H, Nakajima S, Etani T, Miura A, Asada S, Yoshida K, Noda Y, Takeuchi H. Efficacy and moderators of prevention and treatment of delirium with melatonin receptor agonists: A systematic review and meta-analysis of randomized controlled trials. *Gen Hosp Psychiatry*. 2023 Nov-Dec;85:71-79.
 35. Mimura Y, Tobari Y, Nakajima S, Takano M, **Wada M**, Honda S, Bun S, Tabuchi H, Ito D, Matsui M, Uchida H, Mimura M, Noda Y. Decreased short-latency afferent inhibition in individuals with mild cognitive impairment: A TMS-EEG study. *Prog Neuropsychopharmacol Biol Psychiatry*. 2024 Feb 12;132:110967. doi: 10.1016/j.pnpbp.2024.110967.
 36. Kaneko N, **Wada M**, Nakajima S, Takano M, Taniguchi K, Honda S, Mimura M, Noda Y. Neuroplasticity of the left dorsolateral prefrontal cortex in patients with treatment-resistant depression as indexed with paired associative stimulation: a TMS-EEG study. *Cereb Cortex*. 2024 Jan 31;34(2):bhad515. doi: 10.1093/cercor/bhad515.
 37. Noda Y, Sakaue K, **Wada M**, Takano M, Nakajima S. Development of Artificial Intelligence for Determining Major Depressive Disorder Based on Resting-State EEG and Single-Pulse Transcranial Magnetic Stimulation-Evoked EEG Indices. *J Pers Med*. 2024 Jan 17;14(1):101.

doi: 10.3390/jpm14010101.

38. Shibukawa S, Kan H, Honda S, **Wada M**, Tarumi R, Tsugawa S, Tobar Y, Maikusa N, Mimura M, Uchida H, Nakamura Y, Nakajima S, Noda Y, Koike S. Alterations in subcortical magnetic susceptibility and disease-specific relationship with brain volume in major depressive disorder and schizophrenia. *Transl Psychiatry*. 2024 Mar 26;14(1):164. doi: 10.1038/s41398-024-02862-7.

Presentation

International Conferences

1. **Wada M**, Noda Y, Shinagawa S, Chung JK, Sawada K, Ogyu K, Tarumi R, Tsugawa S, Miyazaki T, Yamagata B, Graff-Guerrero B, Mimura M, Nakajima S. Effect of education on Alzheimer's disease-related neuroimaging biomarkers in healthy controls, and participants with mild cognitive impairment and Alzheimer's disease - a cross-sectional study. 31th International College of Neuropsychopharmacology, Vienna, Austria, 2018.06.17.
2. Ogyu K, Tsugawa S, Noda Y, Tarumi R, Mimura Y, Yoshida K, Iwata Y, Elsalhy M, Kuromiya M, Kurose S, Masuda F, Plitman E, **Wada M**, Miyazaki T, Graff-Guerrero A, Mimura M, Nakajima S. Glutathione levels in patients with schizophrenia: A systematic review and meta-analysis; American College of Neuropsychopharmacology 57th Annual Meeting, Hollywood, United States, 2018.12.12.
3. Tsugawa S, Tarumi R, Noda Y, Plitman E, Honda S, Matsushita K, Chavez S, Sawada K, Ogyu K, **Wada M**, Fujii S, Miyazaki T, Chakravarty M, Uchida H, Graff-Guerrero A, Mimura M, Nakajima S. Glutamatergic Dysfunction and Volumetric Alteration in Patients with Treatment-Resistant Schizophrenia: a Cross-Sectional Multi-Modal Magnetic Resonance Imaging Study. Society of Biological Psychiatry 74th Annual Meeting, Chicago, United States, 2019.5.18.
4. Ochi R, Noda Y, Tsuchimoto S, Tarumi R, Honda S, Matsushita K, Tsugawa S, Plitman E, Masuda F, Ogyu K, **Wada M**, Miyazaki T, Graff-Guerrero A, Mimura M, Nakajima S. White Matter Microstructural Organizations in Patients With Treatment-Resistant Schizophrenia: A Diffusion Tensor Imaging Study. Society of Biological Psychiatry 74th Annual Meeting, Chicago, United States, 2019.5.18.
5. **Wada M**, Kurose S, Miyazaki T, Nakajima S, Masuda F, Mimura Y, Nishida H, Ogyu K, Tsugawa S, Mashima Y, Plitman E, Chakravarty MM, Mimura M, Noda Y. The P300 event-related potential in bipolar disorder compared to healthy control: a systematic review and meta-analysis. 74th Annual Meeting of the Society of Biological Psychiatry, Chicago, United States, 2019.05.18.

6. Tarumi R, Tsugawa S, Noda Y, Plitman E, Honda S, Matsushita K, Chavez S, Sawada K, **Wada M**, Matsui M, Fujii S, Miyazaki T, Chakravarty MM, Uchida H, Remington G, Graff-Guerrero A, Mimura M, Nakajima S: Glutamatergic neurometabolite levels in patients with severe treatment-resistant schizophrenia: a cross-sectional 3T proton magnetic resonance spectroscopy study. 32th European College of Neuropsychopharmacology, Copenhagen, Denmark, 2019.09.09
7. **Wada M**, Nakajima S, Miyazaki T, Nakanishi T, Xuemei L, Honda S, Ochi R, Tsugawa S, Mimura Y, Arai N, Mimura M, Noda Y. Hyperexcitability of glutaminergic function of the left DLPFC as indexed by TMS-EEG neurophysiology in patients with treatment-resistant depression. 75th Annual Meeting of the Society of Biological Psychiatry, Virtual May – September 2020.
8. **Wada M**, Nakajima S, Honda S, Takano M, Taniguchi K, Tsugawa S, Mimura Y, Mimura M, Noda Y. Reduced glutamatergic cortical facilitation associated with glutamate-related gene expression abnormalities in treatment-resistant depression. 61st Annual Meeting of the American College of Neuropsychopharmacology. Arizona, 2022.12.4-7.
9. **Wada M**, Nakajima S, Honda S, Takano M, Taniguchi K, Tsugawa S, Mimura Y, Hattori N, Koike S, Zomorodi R, Blumberger D, Daskalakis Z, Mimura M, Noda Y. Reduced signal propagation from the left dorsolateral prefrontal cortex to the salience network associated with oligodendrocyte abnormalities in treatment-resistant depression. 5th International Brain Stimulation Conference, Lisbon, 2023.2.18-22.
10. Honda S, Noda Y, **Wada M**, Tobar Y, Mimura Y, Koike S, Mimura M, Nakajima S. Alterations of Glutamatergic Levels in the ACC in Patients with Treatment-Resistant Depression. 34th CINP World Congress Neuropsychopharmacology, Montreal, Canada. 2023.5.6-10.
11. **Wada M**, Nakajima S, Taniguchi K, Honda S, Mimura Y, Thorpe KE, Tarumi R, Moriyama S, Tsugawa S, Arai N, Koike S, Uchida H, Daskalakis ZJ, Mimura M, Blumberger DM, Noda Y. Effectiveness of conventional sequential bilateral repetitive transcranial stimulation versus bilateral theta burst stimulation for patients with treatment-resistant depression: a randomized non-inferiority clinical trial. 62nd Annual Meeting of the American College of Neuropsychopharmacology, Tampa, Florida, 2023.12.3-6.
12. Honda, S., Noda, Y., **Wada, M.**, Tobar,Y., Mimura, Y., Koike, S., Edden, R. A., Cassidy, C. M., Uchida, H., Mimura, M., Nakajima, S. Roles of glutamate, GABA, dopamine, and norepinephrine in a pathological basis of treatment-resistant depression: a multimodal MRI study. The 62nd Annual Meeting of the American College of Neuropsychopharmacology, Tampa, Florida, U.S. 2023.12.3-6.

Domestic Conferences

1. **Wada M**, Mimura M, Honda M, Natsubori A, Ogyua K, Tarumi R, Kitahata R, Nakajima S: Neuroimaging Correlates of Narcolepsy: A Systematic Review. 27th academic meeting of Japanese Society of ClinicalNeuropsychopharmacology Matsue, Japan, 2017.11.2
2. Ogyu K, Kubo K, Noda Y, Moriguchi S, Tsugawa S, Omura Y, **Wada M**, Tarumi R, Kitahata R, Uchida H, Mimura M, Nakajima S. Kynurenic acid levels in the serum and cerebrospinal fluid in major depressive disorder: a systematic review and meta-analysis, 27th academic meeting of Japanese Society of Clinical Neuropsychopharmacology, Matsue, Japan, 2017.11.3
3. Tsugawa S, Tarumi R, Noda Y, Mimura Y, Yoshida K, Iwata Y, Elsalhy M, Kuromiya M, Masuda F, Ogyu K, **Wada M**, Miyazaki T, Mimura M, Nakajima S; Glutathione levels in patients with schizophrenia: A systematic review and meta-analysis; The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, Kobe, Japan, 2018.9.7
4. Tsugawa S, Tarumi R, Noda Y, **Wada M**, Honda S, Fujii S, Chakravarty MM, Plitman E, Graff-Guerrero A, Miyazaki T, Uchida H, Mimura M, Nakajima S; The relationship between volumetric alteration and glutamatergic neurometabolite levels in precommissural caudate in patients with chronic schizophrenia; The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, Kobe, Japan, 2018.9.7
5. Tsugawa S, Tarumi R, Noda Y, **Wada M**, Honda S, Fujii S, Chakravarty MM, Plitman E, Graff-Guerrero A, Miyazaki T, Uchida H, Mimura M, Nakajima S; micro-structural volumes of the limbic system in patients with treatment-resistant schizophrenia; The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, Kobe, Japan, 2018.9.7
6. Ogyu K, Kubo K, Noda Y, Iwata Y, Tsugawa S, Omura Y, **Wada M**, Tarumi R, Plitman E, Moriguchi S, Miyazaki T, Uchida H, Graff-Guerrero A, Mimura M, Nakajima S: Kynurenine pathway in depression: A systematic review and meta-analysis; The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, Kobe, Japan, 2018.9.6
7. Masuda F, Nakajima S, Miyazaki T, Tarumi R, Ogyu K, **Wada M**, Tsugawa S, Mimura M, Noda Y: Clinical Effectiveness of Repetitive Transcranial Magnetic Stimulation Treatment in Children and Adolescents with Neurodevelopmental Disorders: A Systematic Review;

The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, Kobe, Japan, 2018.9.6

8. **Masataka Wada**, Yoshihiro Noda, Shunichiro Shinagawa, Kyosuke Sawada, Kamiyu Ogyu, Ryosuke Tarumi, Sakiko Tsugawa, Bun Yamagata, Takahiro Miyazaki, Masaru Mimura, Shinichiro Nakajima: Effect of educational attainment on Alzheimer's disease-related neuroimaging biomarkers in healthy controls, and participants with mild cognitive impairment and Alzheimer's disease ; The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, Kobe, Japan, 2018.9.6
9. **Masataka Wada**, Ryosuke Tarumi, Takahiro Miyazaki, Sakiko Tsugawa, Shiori Honda, Yu Mimura, Shinya Fujii, Shinichiro Nakajima, Masaru Mimura, Yoshihiro Noda: The relationship between electroencephalography delta activity and cognitive function in patients with chronic schizophrenia; The Joint Congress of the 40th Annual Meeting of Japanese Society of Biological Psychiatry and the 61st Annual Meeting of the Japanese Society for Neurochemistry, Kobe, Japan, 2018.9.6
10. Tarumi R, Tsugawa S, Noda Y, Plitman E, Honda S, Matsushita K, Ochi R, Chavez S, Sawada K, Ogyu K, **Wada M**, Fujii S, Miyazaki T, Chakravarty MM, Uchida H, Remington G, Graff-Guerrero A, Mimura M, Nakajima S: Glutamate levels in patients with treatment-resistant schizophrenia: a cross-sectional proton magnetic resonance spectroscopy study. 40th Annual Meeting of Japanese Society of Biological Psychiatry, Niigata, Japan, 2019.6.23.
11. **Wada M**, Noda Y, Miyazaki T, Mimura M, Nakajima S, Kimura S, Sasaki K, Ueno T, Ito W, Honda M. Theta power alteration during sleep stage N2 in patients with narcolepsy. 49th Japanese Society of Clinical Neurophysiology, Fukushima, Japan, 2019. 11. 28.
12. **Wada M**, Nakajima S, Miyazaki T, Nakanishi T, Xuemei L, Honda S, Ochi R, Tsugawa S, Mimura Y, Arai N, Mimura M, Noda Y. Reduced interhemispheric signal transmission through corpus callosum as indexed by TMS-EEG neurophysiology in patients with treatment-resistant depression. 41th Annual Meeting of Japanese Society of Biological Psychiatry, Sendai, Japan, 2020.8.21-23.
13. **Wada M**, Nakajima S, Miyazaki T, Nakanishi T, Xuemei L, Honda S, Ochi R, Tsugawa S, Mimura Y, Arai N, Mimura M, Noda Y. TMS-evoked functional connectivity between the DLPFC in MDD as a potential biomarker and predictor of treatment response. 50th Japanese Society of Clinical Neurophysiology, Kyoto, Japan, 2020.11.26-28.
14. **Wada M**, Nakajima S, Honda S, Nakanishi T, Xuemei L, Arai N, Mimura Y, Tsugawa S, Miyazaki T, Mimura M, Noda Y. Restored effective connectivity from the DLPFC to

amygdala with repetitive transcranial magnetic stimulation for treatment-resistant depression, 17th Japanese Society of Mood Disorder, Kanagawa, Japan, 2021.7.8.

15. **Wada M**, Nakajima S, Honda S, Takano M, Taniguchi K, Tsugawa S, Mimura Y, Mimura M, Noda Y. Reduced glutamatergic function indexed by intercortical facilitation in the left dorsolateral prefrontal cortex using TMS-EEG method in treatment-resistant depression and its association with glutamate-related gene expressions. 44th Annual Meeting of Japanese Society of Biological Psychiatry, Tokyo, Japan, 2022.11.4-6.
16. **Wada M**, Nakajima S, Honda S, Takano M, Taniguchi K, Tsugawa S, Mimura Y, Hattori N, Koike S, Mimura M, Noda Y. Reduced signal propagation elicited by prefrontal TMS associated with oligodendrocyte abnormalities in TRD. 52th Japanese Society of Clinical Neurophysiology, Kyoto, Japan, 2022.11.24-26.
17. **Wada M**, Nakajima S, Taniguchi K, Mimura Y, Honda S, Tsugawa S, Tarumi R, Mimura M, Noda Y. Interim analysis for effectiveness of bilateral-TBS for TRD: randomized noninferiority trial. The 119th Annual Meeting of the Japanese Society of Psychiatry and Neurology, Yokohama, Japan, 2023.6.22.
18. **Wada M**, Nakajima S, Taniguchi K, Honda S, Takano M, Mimura Y, Moriyama S, Mimura M, Noda Y. Stratification of Neurophysiological Markers Associated with Responsiveness to Repetitive Transcranial Magnetic Stimulation Therapy in Treatment-Resistant Depression. The 45th Annual Meeting of the Japanese Society of Biological Psychiatry, Nago, Okinawa, Japan, 2023.11.06.
19. **Wada M**, Nakajima S, Honda S, Takano M, Taniguchi K, Tobari Y, Mimura Y, Moriyama S, Mimura M, Noda Y. Signal Propagation from DLPFC to ACC is Decreased in Treatment-Resistant Depression and Improved by rTMS treatment. The 53rd Annual Meeting of the Japanese Society of Clinical Neurophysiology, Fukuoka, Japan. 2023.11.30.

Symposia

1. Potentials of rTMS for neurodevelopmental disorders and the road to clarification of TMS neuropathology, Asian Clinical Neuropsychopharmacology, Fukuoka, Japan, 2019.10.12.
2. Characteristics and Treatment of Sleep Disorders in Neurodevelopmental Disorders, The 119th Annual Meeting of the Japanese Society of Psychiatry and Neurology, Yokohama, Japan, 2023.6.23.

RESEARCH AWARDS

Career Support Awards

1. Nakatani Foundation; Investigative Research Grants. 2019-2023. Total Support: JPY6,800,000 (US\$54,000)
2. Nakatani Foundation; Scholarship for study abroad. 2024-2026. Total Support: JPY12,000,000 (US\$80,000)
3. Japan Society for the Promotion of Science; Scholarship for study abroad. 2024-2026. Total Support: JPY12,000,000 (US\$80,000)

Operating Grants (Peer-reviewed)

1. Elucidation of the pathophysiology of sleep disorders through excitatory/ inhibitory imbalance using TMS-EEG method 2020-2023
Japan Society for the Promotion of Science, Grants-in-Aid for young researchers
Total Support: 5,000,000yen (approx. US\$36,500\$)
2. Development of anterior cingulate gyrus neuromodulation for innovative treatment of treatment-resistant depression. 2022-2027
Takeda Science Foundation, Grants-in-Aid for Neuropsychiatry research
Total Support: 2,000,000yen (approx. US\$14,616\$)