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Emproyment

February 2019~

Boston Attention and Learning Laboratory

Supervisors: Michael Esterman, Ph.D.

March 2019~

Cooperate Researcher, Department of Cognitive Neuroscience, Advanced Telecommunications
Research Institute International

Supervisors: Hiroshi Imamizu, Ph.D., Mitsuo Kawato, Ph.D.

April 2018~

Laboratory for Brain Connectomics Imaging, RIKEN Center for Biosystems Dynamics Research

Supervisors: Takuya Hayashi, Ph.D.

April 2017~February 2019

Intern researcher, Department of Cognitive Neuroscience, Advanced Telecommunications Research
Institute International

Supervisors: Hiroshi Imamizu, Ph.D., Mitsuo Kawato, Ph.D.

Education

March 2019: Ph.D. in Informatics, Kyoto University

Supervisors: Shin Ishii, Ph.D., Hiroshi Imamizu, Ph.D., Mitsuo Kawato, Ph.D.

Doctoral thesis: “Functional magnetic resonance imaging-based methods for
translational research of psychiatric disorders”

March 2014: M.S. in Informatics, Kyoto University

Supervisors: Shin Ishii, Ph.D., Hiroshi Imamizu, Ph.D., Mitsuo Kawato, Ph.D.

Thesis: “Basic research for connectivity neurofeedback training – Nature of resting
state functional connectivity and its relationship with cognitive functions”

March 2012: B.S. in Engineering, Kyoto University

Research Support

2018: TOYOBO Biotechnology Research Foundation, 4,500,000 JPY

2016: Research Fellow of Japan Society for the Promotion of Science (JSPS DC2), 1,000,000 JPY

2015: Research Fellow of Japan Society for the Promotion of Science (JSPS DC2), 1,000,000 JPY

Honors & Awards

2017: Real-time functional imaging and neurofeedback conference 2017. Travel Award

2017: TOUHOKU Winter School 2017. Best Poster Award

2016: 16th Winter workshop "Mechanism of Brain and Mind". Travel Award

2014: TOUHOKU Winter School 2014. Best Poster Award

2013: 13th Winter workshop "Mechanism of Brain and Mind". Travel Award

Publications

Research papers (Published)

[3] A. Yamashita, N. Yahata, T. Itahashi, G. Lisi, T. Yamada, N. Ichikawa, et al. Harmonization of resting-state functional MRI data across multiple imaging sites via the separation of site differences into sampling bias and measurement bias. *PLoS Biol* 17(4): e3000042.

<https://doi.org/10.1371/journal.pbio.3000042> (2019)

[2] A. Yamashita, S. Hayasaka, M. Kawato, H. Imamizu: Connectivity neurofeedback training can differentially change functional connectivity and cognitive performance, *Cerebral Cortex*, 1-11, doi: 10.1093/cercor/bhx177 (2017)

[1] M. Fukuda, A. Yamashita, M. Kawato, H. Imamizu: Functional MRI neurofeedback training on connectivity between two regions induces long-lasting changes in intrinsic functional network, *Frontiers in Human Neuroscience*, 9(160), doi: 10.3389/fnhum.2015.00160 (2015)

Research papers (in Preparation / Submitted)

[1] A. Yamashita, T. Yamada, N. Yahata, A. Kunimatsu, N. Okada, T. Itahashi, R. Hashimoto, H. Mizuta, N. Ichikawa, M. Takamura, G. Okada, H. Yamagata, K. Harada, K. Matsuo, S. C Tanaka, M. Kawato, K. Kasai, N. Kato, H. Takahashi, Y. Okamoto, O. Yamashita and H. Imamizu (in preparation): Common brain networks between major depressive disorder and symptoms of depression that are valid for independent cohorts

Presentations

[4] A. Yamashita, S. Hayasaka, M. Kawato, H. Imamizu (2017, November). Resting-state functional connectivity as an index of measuring and predicting neurofeedback learning, Real-time functional

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imaging and neurofeedback conference 2017 (rtFIN2017), Nara

[3] *A. Yamashita*, S. Hayasaka, M. Kawato, H. Imamizu (2017, November). Functional Connectivity Neurofeedback Training Can Differentially Change Functional Connectivity and Cognitive Performance, Poster presented at the rtFIN2017, Nara

[2] *A. Yamashita*, G. Lisi, N. Ichikawa, M. Takamura, Y. Yoshihara, T. Itahashi, T. Yamada, G. Okada, H. Mano, Y. Sakai, O. Yamashita, J. Morimoto, N. Yahata, R. Hashimoto, H. Takahashi, Y. Okamoto, M. Kawato, and H. Imamizu (2017, November). Sampling biases and measurement biases due to different sites in resting-state functional connectivity data comparable with effects of mental disorders, Poster presented at the Society for Neuroscience 2017, Washington, D.C.

[1] *A. Yamashita*, S. Hayasaka, M. Kawato, H. Imamizu (2016, June). Direct evidence of functional connectivity influencing behavior: Connectivity neurofeedback training differentially changes cognitive performance. Poster presented at the Annual Meeting of the Organization for Human Brain Mapping, Geneva.

Research Interest

Neuroscience: Computational Neuroscience, Computational Psychiatry, Cognitive Neuroscience (sustained attention, motivation, learning), real-time fMRI, resting state fMRI

Informatics: Artificial intelligence, Machine learning, Reinforcement learning

Skill

Computer Skill: MATLAB, R, Python, Shell script

fMRI analysis tool: SPM, FSL, functional connectivity, real-time fMRI

Experimental tool: Psychtoolbox

Language Skill

- **Japanese:** Mother Tongue
- **English:** Fluent (15 years)
- **Chinese:** Basic (1 year)