

CURRICULUM VITAE

Darren Ri-Sheng Liang

Education

- 09/2020 – 08/2022 **University of Western Ontario, London, Canada**
 Masters of Science (M.Sc.)
 Cognitive, Developmental and Brain Sciences (CDBS) in Psychology
cGPA: 92.5/100
Thesis: Role of the default-mode network during narrative integration in major depressive disorder
Supervisor: Stefan Köhler
- 09/2014 – 06/2018 **University of Toronto, Toronto, Canada**
 Honours Bachelors of Science (H.B.Sc.), Graduated with Distinction
 Specialist Cooperative Program in Psychology
cGPA: 3.24/4.00
Project: The role of oscillatory brain networks in understanding age-related decline in speech perception
Supervisor: Bernhard Ross

Work Experience

- 12/2025 – **University Health Network (UHN), Toronto, Canada**
 Project Manager
Supervisor: Kâmil Uludağ
- 08/2022 – 11/2025 **Centre for Addiction and Mental Health (CAMH), Toronto, Canada**
 Research Laboratory Manager
Supervisor: Jamie Feusner
- 01/2022 – 04/2022 **University of Western Ontario, London, Canada**
 Graduate Teaching Assistant
Course: PSYCHOL 3800G Psychological Statistics Using Computers
- 09/2021 – 12/2021 **University of Western Ontario, London, Canada**
 Graduate Teaching Assistant
Course: PSYCHOL 3800F Psychological Statistics Using Computers
- 09/2020 – 04/2021 **University of Western Ontario, London, Canada**
 Graduate Teaching Assistant
Course: PSYCHOL 2800E Research Methods in Psychology
- 08/2019 – 06/2020 **Baycrest Health Sciences, Toronto, Canada**
 Manager, Laboratory
Supervisor: Linda Mah
- 08/2018 – 08/2019 **Baycrest Health Sciences, Toronto, Canada**
 Research Assistant
Supervisor: Linda Mah
- 06/2018 – 08/2018 **Syneos Health, Toronto, Canada**
 Volunteer Recruiter I, Early Phase
Industry, CRO in pharmaceutical clinical trials

05/2016 – 12/2016 **Baycrest Health Sciences, Toronto, Canada**
 Research Assistant, Co-op
Supervisor: Bernhard Ross

Honors & Awards

09/2021 – 08/2022 **Western Graduate Research Scholarship**
 University of Western Ontario
 04/2021 **Reva Gerstein Fellowship for Masters Study in Psychology**
 Department of Psychology
 University of Western Ontario
 09/2020 – 08/2021 **Western Graduate Research Scholarship**
 University of Western Ontario
 06/2019 **Best Geriatric Poster Award**
 Harvey Stancer Research Day
 Department of Psychiatry, University of Toronto

Publications & Presentations

Publications

Liang, D. R. S. (2022). *Role of the default-mode network during narrative integration in major depressive disorder* (Master's thesis, The University of Western Ontario (Canada)).
 Murari, G., **Liang, D.R.S.**, Ali, A., Chan, F., Mulder-Heijstra, M., Verhoeff, N.P.L.G., Herrmann, N., Chen, J.J., & Mah, L. (2020). Prefrontal GABA levels correlate with memory in older adults at high risk for Alzheimer's disease. *Cerebral Cortex Communications*, 1(1), <https://doi.org/10.1093/texcom/tgaa022>.

Submitted Articles

Farahani, M.V., Yalda, N., Gopinath, G., Chakraborty, S., **Liang, D.R.S.**, Palaniyappan, L., Burhan, A.M., Khan, A.R., Köhler, S. Exploring the brain-behaviour axis in treatment resistant depression: Hippocampal subfield-specific volume reductions and widespread cognitive impairments.

Published Abstracts

Feusner, J., Karsan, S., Diaz, J., **Liang, D.**, Master, R., Groe, K., Penn, M. & Cazzato, V. (2024, December). Assessing the Feasibility of Online Body Size Estimation Using a Digital Avatar Tool and Video Capture. In *NEUROPSYCHOPHARMACOLOGY* (Vol. 49, pp. 214-215). CAMPUS, 4 CRINAN ST, LONDON, N1 9XW, ENGLAND: SPRINGER NATURE.
 Mah, L., **Liang, D.**, Chan, F., Ali, A., Mulder-Heijstra, M., Vander Morris, S., Verhoeff, N.P.L.G., Herrmann, N., & Chen, J. J. (2019, August). Subjective memory ability correlates with functional connectivity between the hippocampus and posterior default mode network in cognitively normal older adults. In *INTERNATIONAL PSYCHOGERIATRICS* (Vol. 31, pp. 154-155). 32 AVENUE OF THE AMERICAS, NEW YORK, NY 10013-2473 USA: CAMBRIDGE UNIV PRESS.

Preprints

Feusner, J., **Liang, D. R.**, Groe, K., Diaz-Fong, J. P., Master, R., Karsan, S., Kumar, R., Penn, M., & Cazzato, V. (2025, January 15). Online body size estimation using a digital avatar tool and video capture: a technical report. Retrieved from osf.io/c62s4

Poster Presentations

- Farahani, M.V., **Liang, D.**, Gopinath, G., Yalda, N., Palaniyappan, L., Burhan, A.M., Khan, A.R., & Köhler, S. (2024). *Hippocampal subfield-specific volume and diffusion changes in treatment resistant depression*. Imaging Network Ontario. Mississauga, Canada.
- Yalda N., Farahani, M.V., Gopinath, G., **Liang, D.**, Palaniyappan, L., Burhan, A.M., Levine, B., Khan, A.R., Köhler, S. (2024). *Pervasive impairments on hippocampus-dependent memory tasks in major depressive disorder: Role of memory, executive function, and subfield integrity*. Cognitive Neuroscience Society. Toronto, Canada.
- Dey, S., Hammawa, K., Strober, M., Deshpande, R., **Liang D.**, Feusner, J.D. (2023). *Predicting clinical outcomes in anorexia nervosa using machine learning from functional connectivity*. Organization for Human Brain Mapping. Montreal, Canada.
- Farahani, M.V., **Liang, D.**, Gopinath, G., Yalda, N., Palaniyappan, L., Burhan, A.M., Khan, A.R., & Köhler, S. (2023). *Hippocampal subfield-specific volume and diffusion changes in treatment resistant depression*. Organization for Human Brain Mapping Annual Meeting. Montreal, Canada.
- Yalda N., **Liang, D.**, Farahani, M.V., Gopinath, G., Palaniyappan, L., Burhan, A.M., Khan, A.R., Levine, B., Köhler, S. (2022). *Pervasive impairments on hippocampus-dependent memory tasks in major depressive disorder*. Rotman Research Day. Toronto, Canada.
- Gopinath, G., Farahani, M.V., **Liang, D.**, Yalda N., Palaniyappan, L., Burhan, A.M., Khan, A.R., Levine, B., Köhler, S. (2022). *Specificity of autobiographical memory impairments in Major Depressive Disorder*. Rotman Research Day. Toronto, Canada.
- Liang, D.R.S.**, Farahani, M.V., Chakraborty, S., Gopinath, G., Palaniyappan, L., Burhan, A., Khan, A.R., & Köhler, S. (2022). *Role of the hippocampus and default-mode network during narrative integration in major depressive disorder*. London Health Research Day. London, Canada.
- Mah, L., Murari, G., **Liang, D.**, Herrmann, N., Chen, J.J., & Verhoeff, N.P.L.G. (2020). *Prefrontal GABA correlates with memory in older adults at risk for Alzheimer's disease (AD)*. Organization for Human Brain Mapping Annual Meeting. Montreal, Canada.
- Mah, L., **Liang, D.**, Chan, F., Ali, A., Mulder-Heijstra, M., Vandermorris, S., Verhoeff, N.P.L.G., Herrmann, N., & Chen, J.J. (2019). *Subjective memory ability correlates with functional connectivity between the hippocampus and posterior default mode network in cognitively normal older adults*. International Psychogeriatric Association International Congress, Santiago de Compostela, Spain.
- Sharma, N., **Liang, D.**, Chan, F., Ali, A., Mulder-Heijstra, M., Vandermorris, S., Herrmann, N., Chen, J.J., & Mah, L. (2019). *Subjective memory ability correlates with functional connectivity between both hippocampus and parahippocampal gyrus with the posterior default mode network in cognitively normal older adults*. Harvey Stancer Research Day, Department of Psychiatry, University of Toronto. Toronto, Canada
- Murari, G., **Liang, D.**, Chan, F., Ali, A., Mulder-Heijstra, M., Chen, J.J., & Mah, L. (2019). *Dorsomedial prefrontal GABA+/Cr levels correlate with memory and personality in*

- older adults at risk for Alzheimer's disease*. Harvey Stancer Research Day, Department of Psychiatry, University of Toronto. Toronto, Canada.
- Bae, S., **Liang, D.**, Mulder-Heijstra, M., Ali, A., Vandermorris, S., Verhoeff, N.P.L.G., Herrmann, N., Chen, J.J., & Mah, L. (2019). *Association between emotion regulation and medial temporal lobe in older adults at risk for developing Alzheimer's disease (AD)*. Harvey Stancer Research Day, Department of Psychiatry, University of Toronto. Toronto, Canada.
- Groe, K., Chan, F., **Liang, D.**, Ali, A., Mulder-Heijstra, M., Vandermorris, S., Verhoeff, N.P.L.G., Herrmann, N., & Mah, L. (2019). *Subjective memory ability in mild cognitive impairment and subjective cognitive decline and association with hippocampal volume*. Harvey Stancer Research Day, Department of Psychiatry, University of Toronto. Toronto, Canada.
- Mah, L., Mulder-Heijstra, M., Ali, A., Chan, F., **Liang, D.**, Vandermorris, S., Verhoeff, N.P.L.G., Herrmann, N., & Chen, J.J. (2019). *Relationship between emotion regulation strategy and neuroimaging biomarkers of Alzheimer's disease*. Organization for Human Brain Mapping Annual Meeting. Rome, Italy.
- Mah, L., **Liang, D.**, Chan, F., Ali, A., Mulder-Heijstra, M., Vandermorris, S., Verhoeff, N.P.L.G., Herrmann, N., & Chen, J.J. (2019). *Subjective memory ability correlates with functional connectivity between the hippocampus and posterior default mode network in cognitively normal older adults*. Canadian Neuroscience Meeting. Toronto, Canada.
- Bae, S., **Liang, D.**, Mulder-Heijstra, M., Ali, A., Chan, F., Vandermorris, S., Verhoeff, N.P.L.G., Herrmann, N., Chen, J.J. & Mah, L. (2019). *Association between emotion regulation and medial temporal lobe in older adults with subjective cognitive decline*. International Congress on Magnetic Resonance Imaging. Seoul, South Korea.

Memberships

- 09/2021 – 08/2022 **Psychology Colloquium Committee, University of Western Ontario**
Committee Member
- 03/2021 – 03/2022 **Cognitive Neuroscience Society**
Graduate Student Member

Research Skills & Expertise

- Experience in multimodal neuroimaging including recruitment, data collection and analyses using techniques in MEG, MRI, EEG, and PET in multi-site clinical studies
- Developed functions for experiments and analyses utilizing Python, MATLAB, SPSS, R, Presentation, and Unix programming languages in Linux and Windows-based machines
- Proficient use of PubMed, PsycINFO, Ovid, and other search engines for research of academic articles intended for research proposals, abstracts, presentations, publications
- Committed to Standard Operating Procedures (SOPs), related FDA, Good Clinical Practice (GCP), ICH guidelines, Tri-Council Policy Statement, and research ethics board standards for working with confidential information involving human subjects