RUIYANG GE

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ACADEMIC POSITIONS

2021 - present	Research Scientist, Department of Psychiatry & Djavad Mowafaghian Centre for Brain Health,	
	The University of British Columbia, Vancouver, Canada	
2016 - 2020	Post-doctoral Research Fellow, Department of Psychiatry, The University of British Columbia,	
	Vancouver, Canada	
EDUCATION		
2012 - 2015	Ph.D. in Computer Science, School of Artificial Intelligence & State Key Laboratory of	
	Cognitive Neuroscience and Learning, Beijing Normal University (BNU), Beijing, P.R.C	
	Dissertation: "Sparse independent component analysis method and its application in functional	
	magnetic resonance imaging (fMRI) based research"	
2010 - 2012	M.S. in Computer Science, State Key Laboratory of Cognitive Neuroscience and Learning &	
	IDG/McGovern Institute for Brain Research, BNU (transferred to a Ph.D. program, and	
	finished all M.S. courses), Beijing, P.R.C	
	Dissertation [¶] : "Age-related alterations of brain network underlying the retrieval of emotional	
	autobiographical memories: an fMRI study with independent component analysis"	
2006 - 2010	B.Eng. in Biomedical Engineering, School of Computer and Information Technology, Beijing	
	Jiaotong University (BJTU), Beijing, P.R.C	

Reseach Interests

Machine Learning; Computational Psychiatry; Neuroinformatics; Neuroimaging; Digital Mental Health

GRANTS & AWARDS

2023	Stimulus-Child and Youth Mental Health Grant, CAD \$18,000		
2022	Society of Biological Psychiatry Travel Fellowship Award, USD \$2,000		
2020	IMH Marshall Fellowship, CAD \$75,000		
2019 - 2020	Innovation Fund Trainee Award, Djavad Mowafaghian Centre for Brain Health, CAD		
	$5,000/year \times 2 = 10,000$		
2019	Outstanding Poster Award, The 3rd International Brain Stimulation Conference, USD \$500		
2014	National Scholarship for Distinguished Graduates, ¥30,000		
2013	First Prize Academic Scholarship, Beijing Normal University, ¥15,000		
2012	Scholarship of Excellent Contribution to Public Interest/Social Work, State Laboratory of		
	Cognitive Neuroscience and Learning, ¥500		
2012	Academic Scholarship, State Laboratory of Cognitive Neuroscience and Learning, ¥2,000		
2011	Excellent Student Cadre, State Laboratory of Cognitive Neuroscience and Learning		
2011	Innovative Artwork of the Brain and Lab, State Laboratory of Cognitive Neuroscience and		
	Learning, ¥300		
2007 - 2010	Academic Excellence Scholarship, BJTU, $\$800$ /semester $\times 6 = \$4,800$		

TEACHING EXPERIENCE

Lecturer

Spring Semester 2014 Fall Semester 2013

- <u>Teaching Assistant:</u>
 Fall Semester 2011
- Workshop/Symposium Instructor June 2012 Oct. 2013

Undergraduate Course, School of Artificial Intelligence, Beijing Normal University (BNU) Course Name: Fundamentals of Digital Electronics Course Name: Fundamentals of Digital Electronics Undergraduate Course, School of Artificial Intelligence, BNU Course Name: Fundamentals of Digital Electronics IDG/McGovern Institute for Brain Research, Beijing, P.R.C Functional Connectivity and Networks Analysis Methods Workshop The First Real-time Functional MRI Symposium, International Symposium on Frontiers in Functional Brain Imaging (ISFFBI), Beijing, P.R.C

SUPERVISION EXPERIENCE

I have supervised and co-supervised undergraduate and graduate studentsAn asterisk (*) denotes individuals for whom I served as the primary mentor.

Undergraduate Students

Dates	Name; Affiliation	Outputs
Sept. 2022 – present	Hao Qi Cui*; UBC Computer Science	https://centilebrain.org/; publication #5
Nov. 2021 – May 2022	Shiyu Chen*; UBC Computer Science	https://centilebrain.org/; publication #1
Sept. 2021 – May 2022	Yi Xuan Qi*; UBC Computer Science	https://centilebrain.org/; publication #1
Sept. 2021 – May 2022	Yuetong Yu*; UBC Math	https://centilebrain.org/; publication #1
Jan. 2021 – May 2021	Chuntong Gao*; UBC Computer Science	https://centilebrain.org/; publication #1
Jan. 2021 – May 2021	Yunan Fan*; UBC Math	https://centilebrain.org/; publication #1
Dec. 2019 – May 2020	Tyler Keeling*; UBC Computer Science	publication #18
Dec. 2019 – May 2020	Shiqing Ding*; UBC Math	publication #18
Sept. 2017 – May 2018	Xiang Liu; UBC Computer Science	publications #16 and #24
Sept. 2017 – May 2018	Paul Kot; UBC Physics	publication #24
Sept. 2013 – May 2014	Jipeng Zhang; BNU Computer Science	publication #30
Sept. 2013 – May 2014	Yubao Wang; BNU Computer Science	publication #30
■ Graduate Students		
Dates	Name; Affiliation	Output(s)
Sep 2022 – present	Yuetong Yu; UBC Psychiatry	publication #5
Sep 2019 – Jan. 2020	Yanmei Shen; Second Xiangya Hospital	publication #11
	of Central South University, P.R.C	

SELECTED PRESENTATIONS

January 2024	"CentileBrain Models: An Introducation of the Normative Modeling of Brain
	Morphometry" at The Chinese Open Science Network (COSN)
June 2023	"Normative Modeling of Brain Morphometry Across the Lifespan Using CentileBrain:
	Algorithm Benchmarking and Model Optimization" at Department of Psychiatry
	Research Day, University of British Columbia, Vancouver, BC, Canada

Mar. 2023	"Normative modeling of brain morphometry across the lifespan using CentileBrain" at
	University Medical Center Groningen, Groningen, Netherlands
Feb. 2023	"Predictive Value of the MRI Techniques for Treatment Outcomes of Depression with
	rTMS" at National Clinical Research Center for Mental Disorders and Department of
	Psychiatry, The Second Xiangya Hospital of Central South University, Changsha, P.R.C
Jan. 2023	"Neuroimaging profiling identifies distinct brain maturational subtypes of youth with
	mood and anxiety disorders" at State Key Lab of Cognitive Neuroscience and Learning,
	Beijing Normal University, Beijing, P.R.C
Dec. 2022	"Normative modeling of brain morphometry across the lifespan based on big
	neuroimaging data" at Institute of Psychology, Chinese Academy of Science, Beijing,
	P.R.C
June 2021	"Acute functional connectivity changes induced by repetitive transcranial magnetic
	stimulation predict therapeutic response in treatment-resistant depression" at
	Department of Psychiatry Research Day, University of British Columbia, Vancouver,
	BC, Canada
Jan. 2021	"Brain functional changes induced by repetitive transcranial magnetic stimulation" at
	Chinesisch-Deutsche Gesellschaft für Translationale Medizin, Germany
Jan. 2021	"Structural brain networks based on source-based morphometry" at Institute of
	Psychological Sciences, Hangzhou Normal University, Hangzhou, P.R.C
June 2018	"Structural and functional neural correlates of transcranial magnetic stimulation in
	major depression" at Department of Psychiatry, Sir Run-Run Shaw Hospital, Zhejiang
	University School of Medicine, Hangzhou, P.R.C
Dec. 2017	"Functional disconnection of the hippocampal sub-regions and its correlates to
	cognitive outcomes in treatment-resistant major depressive disorder" at Neuro-Seminar
	at CBH-UBC, Vancouver, BC, Canada
May. 2016	"Baseline functional brain activity/circuits are related to improvements following TMS-
	based treatment for major depressive disorder" at Department of Psychiatry Research
	Day, University of British Columbia, Vancouver, BC, Canada

Professional Experience

Co-Founder	The Translational Neuroimaging Educational Program
Examining Committee Nominee	Honor thesis for Farhad Ghaseminejad, April 2018, UBC
Editorial Boards	Editorial Board Member: BMC Psychiatry
	npj Mental Health Research
	Guest Editor: BMC Neurology
	Editor: Frontiers in Neuroimaging
	Frontiers in Neuroscience
	Frontiers in Psychiatry
Co-Organizer	Social Event of Chinese Young Scholars @ 2023 OHBM Annual Meeting
Ad-hoc Reviewer	
Journals	Computer Science and Engineering
	 Computational and Mathematical Methods in Medicine
	 IEEE Journal of Biomedical and Health Informatics
	- IEEE Transactions on Neural Systems and Rehabilitation Engineering

- Journal of Medical Imaging and Health Informatics
- Quantitative Imaging in Medicine and Surgery

Psychiatry

- Biological Psychiatry
- BJPsych Open
- BMC Psychiatry
- Frontiers in Psychiatry
- Journal of Affective Disorders
- Journal of Affective Disorders Reports
- Nature Mental Health
- Neuropsychopharmacology
- Psychological Medicine
- Psychiatry Research
- Psychiatry and Clinical Neuroscience
- Schizophrenia Bulletin

Neuroscience

- BMJ Open
- Brain and Behavior
- Brain Stimulation
- Brain Imaging and Behavior
- Frontiers in Aging Neuroscience
- Frontiers in Human Neuroscience
- Journal of Neuroscience Methods
- Human Brain Mapping
- Metabolic Brain Disease
- NeuroImage
- Neuropsychologia
- Neuroscience and Biobehavioral Reviews
- Scientific Reports
- Conferences Annual Meeting of the Organization for Human Brain Mapping (OHBM; years 2017-2023)
 - The 5th International Conference on Biomedical Engineering and Biotechnology, 2017
- <u>Membership of Learned</u> Society of Biological Psychiatry (SOBP)
 <u>Societies</u> Organization of Human Brain Mapping (OHBM)

FULL PBLICATION LIST

- Journal Articles (in chronological order)
- 1. Ge R, Yu Y, Qi Y. X, et al., Jahanshad N, Thompson P.M, Frangou S. Normative modeling of brain morphometry across the lifespan using CentileBrain: algorithm benchmarking and model optimization. *Lancet Digit Health* (accepted). 2024.
- 2. Ge R, [the ENIGMA-22q Working Group], Vila-Rodriguez F, Bearden C. Source-based Morphometry Reveals Structural Brain Pattern Abnormalities in 22q11.2 Deletion Syndrome. *Hum Brain Mapp*. 2024; 45(1):e26553.
- 3. Haas S. S, Ge R, Agartz I, et al., Kahn R. S, Corcoran C. M, Frangou S, and the ENIGMA Clinical High Risk for

Psychosis Working Group. Normative modeling of brain morphometry in Clinical High-Risk for Psychosis. *JAMA Psychiatry* (in press). 2024; 81(1):77-88. PMID: 37819650

- 4. Ge R, Sassi R, Yatham LN, Frangou S. Neuroimaging profiling identifies distinct brain maturational subtypes of youth with mood and anxiety disorders. *Mol Psychiatry*. 2023; 28:1072-1078. PMID: 36577839.
- Yu Y, Cui H, Haas S, New F, Sanford N, Yu K, Zhan D, Yang G, Gao J, Wei D, Qiu J, Bernhardt B, Thompson P, Frangou S, Ge R. Brain-age prediction: systematic evaluation of site effects, and sample age range and size. *bioRxiv*. 2023: <u>https://www.biorxiv.org/content/10.1101/2023.11.06.565917v1</u>
- Song S, Liu A, Gao Zeyuan, Tian X, Zhu L, Shang H, Gao S, Zhang M, Zhao S, Xiao G, Zheng Y, Ge R. Eventrelated alpha power response in early stage of facial expression processing in social anxiety: influence of language context. *Psychophysiology* (in press). 2023. PMID: 37817450
- Tan V, Jeyachandra J, Ge R, Dickie EW, Gregory E, Vanderwal T, Vila-Rodriguez F, Hawco C. Subgenual cingulate connectivity as a treatment predictor during low-frequency right dorsolateral prefrontal rTMS: A concurrent TMS-fMRI study. *Brain Stimul.* 2023; 16(4): 1165-1172. PMID: 37543171.
- Torres IJ, Ge R, McGirr A, Vila-Rodriguez F, Ahn S., Basivireddy J, Walji N, Frangou S, Lam RW, Yatham LN. Effects of intermittent theta burst transcranial magnetic stimulation on cognition and hippocampal volumes in bipolar depression. *Dialogues Clin Neurosci*. 2023; 25(1):24-32. PMID: 36924413.
- Ge R, Humaira A, Gregory E, Alamian G, MacMillan EL, Barlow L, Todd R, Nestor S, Frangou S, Vila-Rodriguez F. Predictive value of acute neuroplastic response to rTMS in treatment outcome in depression: A concurrent TMS-fMRI trial. *Am J Psychiatry*. 2022; 179(7):500-508. PMID: 35582784.
- 10. Song S, Zhao S, Jiang T, Li S, Zhang M, Ren W, Zheng Y, **Ge R**. Positive attention bias in high socially anxious individuals: Evidence from an ERP study. *J Affect Disord*. 2022; 319:300-308. PMID: 36162660.
- 11. Shen Y, Gao X, Huang C, Luo X, **Ge R**. Decreased gray matter volume is associated with theory of mind deficit in adolescents with schizophrenia. *Brain Imaging Behav.* 2022; 16(3):1441-1450. PMID: 35060009.
- 12. Chakrabarty T, Frangou S, Torres IJ, Ge R, Yatham LN. Brain age and cognitive functioning in first-episode bipolar disorder. *Psychol Med.* 2022; 53(11) 5127–5135. PMID: 35875930.
- 13. Haas S. S, Ge R, Sanford N, Modabbernia A, Reichenberg A, Whalley HC, Kahn RS, Frangou S. Accelerated global and local brain aging differentiate cognitively impaired from cognitively spared patients with schizophrenia. *Front Psychiatry*. 2022; 13:913470. PMID: 35815015.
- Sanford N, Ge R, Antoniades M, Modabbernia A, Haas S. S, Whalley HC, Galea L, Popescu SG, Cole JH, Frangou S. Sex differences in predictors and regional patterns of brain age gap estimates. *Hum Brain Mapp.* 202; 43(15):4689-4698. PMID: 35790053.
- 15. Ge R, Hassel S, Arnott SR, Davis AD, Harris JK, Zamyadi M, Milev R, Frey BN, Strother SC, Müller DJ, Rotzinger S, MacQueen GM, Kennedy SH, Lam RW, Vila-Rodriguez F. Structural covariance pattern abnormalities of the insula in major depressive disorder: A CAN-BIND study report. *Prog Neuropsychopharmacol Biol Psychiatry*. 2021; 111:110194. PMID: 33296696.
- 16. Ge R, Liu X, Long D, Frangou S, Vila-Rodriguez F. Sex effects on cortical morphological networks in healthy young adults. *NeuroImage*. 2021; 233:117945. PMID: 33711482.
- Ge R, Gregory E, Wang J, Ainsworth N, Jian W, Yang C, Wang G, Vila-Rodriguez F. Magnetic seizure therapy is associated with functional and structural brain changes in MDD: Therapeutic versus side effect correlates. J Affect Disord. 2021; 286:40-48. PMID: 33676262.
- Ge R, Ding S, Keeling T, Honer WG, Frangou S, Vila-Rodriguez F. SS-Detect: Development and validation of a new strategy for source-based morphometry in multiscanner studies. *J Neuroimaging*. 2021;31(2):261-271. PMID: 33270962.
- Ge R, Alamian G, Humaira A, Gregory E, MacMillan EL, Barlow L, Vila-Rodriguez F. Implementation of a TMS-fMRI system: a primer. *bioRxiv*, 2021: <u>https://doi.org/10.1101/2021.05.19.444738</u>

- Danilewitz M, Gao S, Salehinejad MA, Ge R, Nitsche MA, Vila-Rodriguez F. Effect of combined yoga and transcranial direct current stimulation intervention on working memory and mindfulness. *J Integr Neurosci*. 2021; 20(2):367-374. PMID: 34258935.
- Ge R, Downar J, Blumberger DM, Daskalakis ZJ, Vila-Rodriguez F. Functional connectivity of the anterior cingulate cortex predicts treatment outcome for rTMS in treatment-resistant depression at 3-month follow-up. *Brain Stimul.* 2020; 13(1):206-214. PMID: 31668646.
- 22. Gregory E, Torres IJ, Ge R, Blumberger DM, Downar JH, Daskalakis ZJ, Lam RW, Vila-Rodriguez F. Predictors of cognitive impairment in treatment-resistant depression. *J Affect Disord*. 2020; 274:593-601. PMID: 32663992.
- Wang J, Vila-Rodriguez F, Ge R, Gao S, Gregory E, Jiang W, Yang C, Wang G. Accelerated magnetic seizure therapy (aMST) for treatment of major depressive disorder: A pilot study. *J Affect Disord*. 2020; 264:215-220. PMID: 32056753.
- Ge R, Kot P, Liu X, Lang DJ, Wang JZ, Honer WG, Vila-Rodriguez F. Parcellation of the human hippocampus based on gray matter volume covariance: Replicable results on healthy young adults. *Hum Brain Mapp.* 2019; 40(13):3738-3752. PMID: 31115118.
- Ge R, Torres I, Brown JJ, Gregory E, McLellan E, Downar JH, Blumberger DM, Daskalakis ZJ, Lam RW, Vila-Rodriguez F. Functional disconnectivity of the hippocampal network and neural correlates of memory impairment in treatment-resistant depression. *J Affect Disord*. 2019; 253:248-256. PMID: 31060011.
- 26. Ge R, Downar J, Blumberger DM, Daskalakis ZJ, Lam RW, Vila-Rodriguez F. Structural network integrity of the central executive network is associated with the therapeutic effect of rTMS in treatment resistant depression. *Prog Neuropsychopharmacol Biol Psychiatry*. 2019; 92:217-225. PMID: 30685322.
- 27. Vila-Rodriguez F, Ge R, Long D. Interleaved transcranial magnetic stimulation and functional magnetic resonance imaging: A Translational Tool. *Clin Pharmacol Ther*. 2019; 106(4):714-716. PMID: 31412135.
- Sporn L, MacMillan EL, Ge R, Greenway K, Vila-Rodriguez F, Laule C. Longer repetition time proton MR spectroscopy shows increasing hippocampal and parahippocampal metabolite concentrations with aging. J Neuroimaging. 2019; 29(5):592-597. PMID: 31273871.
- 29. Ge R, Blumberger DM, Downar J, Daskalakis ZJ, Tham JCW, Lam RW, Vila-Rodriguez F. A sparse representation-based method for parcellation of the resting brain and its application to treatment-resistant major depressive disorder. *J Neurosci Methods*. 2017; 290:57-68. PMID: 28739164.
- 30. Ge R, Wang Y, Zhang J, Yao L, Zhang H, Long Z. Improved FastICA algorithm in fMRI data analysis using the sparsity property of the sources. *J Neurosci Methods*. 2016; 263:103-14. PMID: 26880161.
- Ge R, Blumberger DM, Downar J, Daskalakis ZJ, Dipinto AA, Tham JCW, Lam R, Vila-Rodriguez F. Abnormal functional connectivity within resting-state networks is related to rTMS-based therapy effects of treatment resistant depression: A pilot study. *J Affect Disord*. 2015; 218:75-81. PMID: 28460314.
- 32. Ge R, Yao L, Zhang H, Long Z. A two-step super-Gaussian independent component analysis approach for fMRI data. *NeuroImage*. 2015; 118:344-58. PMID: 26057592.
- 33. Ge R, Zhang H, Yao L, Long Z. Motor imagery learning induced changes in functional connectivity of the default mode network. *IEEE Trans Neural Syst Rehabil Eng.* 2015; 23(1):138-48. PMID: 25014958.
- 34. Ge R, Fu Y, Wang D, Yao L, Long Z. Age-related alterations of brain network underlying the retrieval of emotional autobiographical memories: an fMRI study using independent component analysis. *Front Hum Neurosci.* 2014; 8:629. PMID: 2517728.
- Hui M, Zhang H, Ge R, Yao L, Long Z. Modulation of functional network with real-time fMRI feedback training of right premotor cortex activity. *Neuropsychologia*. 2014; 62:111-23. PMID: 25058055.
- 36. Zhang H, Long Z, Ge R, Xu L, Jin Z, Yao L, Liu Y. Motor imagery learning modulates functional connectivity of multiple brain systems in resting state. *PLoS One*. 2014; 9(1):e85489. PMID: 2446557.

- <u>Conference Abstracts/Articles (in chronological order)</u>
- Haas S, Ge R, Jalbrzikowski M, Hernaus D, Kahn RS, Corcoran C, Frangou S. Normative modeling of brain morphometry in clinical high-risk for psychosis. *The 78th Society of Biological Psychiatry Annual Meeting*, San Diego, USA, April 27-29, 2023.
- 38. Haas S, Ge R, Kahn RS, Jalbrzikowski M, Hernaus D, Corcoran C, Frangou S. Normative modelling of brain morphometry in individuals at clinical high-risk for psychosis from the ENIGMA CHR Working Group. *The* 62nd American College of Neuropsychopharmacology Annual Meeting, Phoenix, USA, December 3-6, 2022.
- 39. Ge R, Modabbernia A, Frangou S. Neuroanatomical subgroups in juvenile mood and anxiety disorders. *The 77th Society of Biological Psychiatry Annual Meeting*, New Orleans, USA, April 28-30, 2022.
- 40. Haas S, **Ge R**, Sanford N, Modabbernia A, Reichenberg A, Whalley H, Kahn RS, Frangou S. Local and global brain ageing in cognitive subgroups of early psychosis. *The 77th Society of Biological Psychiatry Annual Meeting*, New Orleans, USA, April 28-30, 2022.
- 41. Sanford N, Ge R, Frangou S. Sex differences in regional patterns of brain-age-gap estimates. *The 77th Society of Biological Psychiatry Annual Meeting*, New Orleans, USA, April 28-30, 2022.
- 42. Torres I, McGirr A, Vila-Rodriguez F, Ge R, Frangou S, Yatham L. Effects of intermittent theta burst stimulation on cognitive functioning and hippocampal volumes in bipolar depression. *The 23rd Annual Conference of the International Society for Bipolar Disorders*, Online May 13-15, 2021.
- 43. Ge R, Downar J, Blumberger DM, Daskalakis Z, Lam R, Vila-Rodriguez F. Long-term effects of rTMS on the functional brain networks in treatment-resistant depression. *The 3rd International Brain Stimulation Conference*, Vancouver, Canada, Feb 24-27, 2019.
- 44. Vila-Rodriguez F, Downar J, Blumberger DM, Ge R. Anterior cingulate cortex connectivity and treatment response prediction to rTMS in depression. *The 73rd Society of Biological Psychiatry Annual Meeting*, New York, USA, May 10-12, 2018.
- 45. Wang N, Yan H, Yang Yang Y, **Ge R**. A novel spatial-spectra dynamics-based ranking model for sorting timevarying functional networks from single subject fMRI data. *The 3rd International Conference on Intelligence Science*, Beijing, China, November 2-5, 2018.
- 46. Ge R, Dipinto A, Barlow L, Macmillan E, Mackay A, Alfonso M, Vila-Rodriguez F. A primer on developing interleaved transcranial magnetic stimulation with functional magnetic resonance imaging capability: the UBC experience. *The 2nd International Brain Stimulation Conference*, Barcelona, Spain, March 5-8, 2017.
- 47. Danilewitz M, Pang C, Aur D, Shalbaf R, **Ge R**, Brown J, MacMillan E, Vila-Rodriguez F. The acute effects of a combined yoga and transcranial direct current stimulation on neurophysiological markers: preliminary data. *The 2nd International Brain Stimulation Conference*, Barcelona, Spain, March 5-8, 2017.
- 48. Ge R, Zhang H, Yao L, Wu X, Long Z. Over-complete analysis for resting-state fMRI Data. *The 5th International Conference on Cognitive Neurodynamics*, Sanya, China, June 2-7, 2015.
- <u>Conference Presentations (in chronological order)</u>
- 49. Ge R, Yu Y, Qi Y, Fan Y, New F, Thompson P, Frangou S. Optimizing normative models for regional subcortical volumes. *Annual Meeting of the Organization for Human Brain Mapping*, Glasgow, UK, June 19-23, 2022.
- 50. Ge R, Modabbernia A, Frangou S. Neuroanatomical Subgroups in Juvenile Mood and Anxiety Disorders. *Annual Meeting of the Organization for Human Brain Mapping*, Glasgow, UK, June 19-23, 2022.
- Haas S, Ge R, Modabbernia A, Reichenberg A, Whalley H, Kahn R, Frangou S. Multimodal Neuroimaging Characteristics of Cognitive Subgroups of Early Psychosis. *Annual Meeting of the Organization for Human Brain Mapping*, Glasgow, UK, June 19-23, 2022.
- 52. Sanford N, Ge R, Frangou S. Localized sex differences in anatomical brain-age estimates. *Annual Meeting of the Organization for Human Brain Mapping*, Glasgow, UK, June 19-23, 2022.
- 53. Ge R, Gregory E, Humaira A, Todd R, Nestor S, Frangou S, Vila-Rodriguez F. Perturbation of whole brain

functional connectivity allows individual prediction of rTMS therapeutic effect in treatment-resistant depression. *Annual Meeting of the Organization for Human Brain Mapping*, Online, 2021.

- 54. Ge R, Downar J, Blumberger D, Daskalakis Z, Vila-Rodriguez F. rTMS treatment alters the dynamics between functional networks in treatment-resistant depression. *Annual Meeting of the Organization for Human Brain Mapping*, Online, 2020.
- 55. Ge R, Downar J, Blumberger D, Daskalakis Z, Lam R, Vila-Rodriguez F. Long-term effects of rTMS on the functional brain networks in treatment-resistant depression. *Annual Meeting of the Organization for Human Brain Mapping*, Rome, Italy, June 9-13, 2019.
- 56. Sporn L, MacMillan E, Ge R, Humaira A, Barlow L, Laule C, Vila-Rodriguez F. Initial observations of positiondependent B0 distortions in a concurrent TMS/MRS phantom experiment. *Annual Meeting of the International Society for Magnetic Resonance in Medicine*, Montreal, Canada, May 11-16, 2019.
- 57. Ge R, Torres I, Brown J, MacMillan E, Gregory E, Downar J, Blumberger D, Daskalakis Z, Lam R, Vila-Rodriguez F. Functional disconnection of the hippocampal networks in major depressive disorder. *Annual Meeting of the Organization for Human Brain Mapping*, Singapore, June 17-21, 2018.
- 58. Ge R, Kot P, Liu X, Honer W, Lang D, Vila-Rodriguez F. Parcellation of the human hippocampus based on gray matter volume covariance: a replication study. *Annual Meeting of the Organization for Human Brain Mapping*, Singapore, June 17-21, 2018.
- 59. Ge R, Downar J, Blumberger D, Daskalakis Z, Tham J, Lam R, Vila-Rodriguez F. Altered hippocampal functional networks in treatment-resistant depression. *Annual Meeting of the Organization for Human Brain Mapping*, Vancouver, Canada, June 25-29, 2017.
- 60. **Ge R**, Honer W, Lang D, Barr A, Northcott C, Vila-Rodriguez F. Parcellation of the human hippocampus based on gray matter volume covariance. *Annual Meeting of the Organization for Human Brain Mapping*, Vancouver, Canada, June 25-29, 2017.
- 61. Ge R, Dipinto A, Barlow L, MacMillan E, MacKay A, Alfonso M, Vila-Rodriguez F. The methodology of developing interleaved TMS with fMRI at UBC. *The Society for Neuroscience Annual Meeting*, San Diego, USA, November 12-16, 2016.