

CURRICULUM VITAE

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EDUCATION

1998 –2002 (D. Phil)

Department of Experimental Psychology, University of Oxford, UK

1993 – 1995 (Master)

Graduate Institute of Behavioral Sciences, Kaohsiung Medical University, Taiwan.

1989 – 1993 (Bachelor)

School of Psychology, Kaohsiung Medical University, Taiwan

CURRENT POSITION

Director, Preparatory office of Cognitive Intelligence and Precision Healthcare Research Center (CIPH), National Central University

University Chair Professor, National Central University

EXPERIENCE

April 2015 ~ Jan 2020

Director, Brain Research Center, College of Health Sciences and Technology, National Central University

August 2014 et seq

Chair Professor, Institute of Cognitive Neuroscience, National Central University

January 2012 et seq

Distinguished Professor, Institute of Cognitive Neuroscience, National Central University

August 2011 et seq

Professor

Institute of Cognitive Neuroscience, National Central University, Jhongli, Taiwan

August 2012 ~ April 2013

Vice Dean, College of Science, National Central University

July 2011 ~ August 2011

Visiting Professor

Department of Experimental Psychology & Department of Psychiatry,
University of Oxford, UK

August 2008~July 2011

Associate Professor,
Institute of Cognitive Neuroscience, National Central University, Jhongli, Taiwan

August 2009~February 2010

Visiting Scholar (Fulbright Scholar)
Department of Cognitive Sciences, University of California, Irvine, USA

August 2003~July 2008

Assistant Professor
Institute of Cognitive Neuroscience, National Central University, Jhongli, Taiwan

March 2002~August 2003

Postdoctoral Research Associate to Professor Jeffrey Schall
Department of Psychology, Vanderbilt University, TN, USA

October 1998~March 2002

Research Assistant to Professor Vincent Walsh (Part-time)
Department of Experimental Psychology, University of Oxford, UK

June 1997~July 1998

Research Assistant to Professors Ovid Tzeng and Daisy Hung
Laboratory for Cognitive Neuropsychology, National Yang-Ming University, Taiwan

July 1995~June 1997

Obligatory National Military Service (Navy, Junior-Lieutenant)

November 1993~May 1995

Clinical Neuropsychologist (Part-time)
Department of Neurology, Kaohsiung Medical University Hospital, Taiwan

November 1993~May 1995

Research Assistant to Dr. Chih-Ta Tai and Professor Chun-Kuan Liu (Part-time)
Graduate Institute of Behavioral Sciences, Kaohsiung Medical University, Taiwan

FIELD OF SPECIALTY

The neural mechanism of visual attention and oculomotor control
The neural mechanisms and neuromodulation of the inhibitory control
The development of attentional and inhibitory control in preschoolers
Neural correlates of numerical cognition
The application of Transcranial Magnetic Stimulation in Cognitive Neuroscience
The application of Transcranial Direct Current Stimulation in Cognitive Neuroscience

HONORS & AWARDS

The 23rd Outstanding Alumni Award”, Kaohsiung Medical University
2019 “Academic Summit Program”, Ministry of Science and Technology, Taiwan (for 5 years)
2019 The TWAS(The World Academy of Sciences) Prize in Social Sciences

2018 The first Outstanding Research Award in memory of former NCU President Jialun Luo,
National Central University

2017 Chair Professorship, National Central University

2016 “Outstanding Research Award”, Ministry of Science and Technology, Taiwan (for 3 years)

2015 The Academic Award (Category: Social Science), Ministry of Education, Taiwan

2015 Fellow, Association of Psychological Science, USA

2015 Fellow, The Psychonomic Society, USA

2014 Chair Professorship, National Central University

2013 Distinguished Young Researcher and Teacher, National Central University (for 3 years)

2013 “Outstanding Research Award”, National Science Council, Taiwan (for 3 years)

2012 Distinguished Professorship, National Central University

2010 “Outstanding Research Award”, National Science Council, Taiwan (for 3 years)

2010 Invited Speaker in the 7th International Conference on Cognitive Science (ICCS2010)

2010 “Outstanding Tutor Award”, National Central University

2011, 2010, 2006 “Outstanding Research Award”, National Central University

2009 Fulbright Scholar, Fulbright Scholar Program, USA-Taiwan

2008 Invited Panelist in 16th International Conference on Computers in Education, Taipei,
Taiwan. Educational Games are Harmful to our Kids

2008 National Central University Teaching Excellence Award

2006 Academia Sinica Research Award for Junior Research Investigators

2005 Invited Symposium Speaker in European Brain and Behaviour Society, Dublin, Ireland

2004 Invited Speaker in the International Symposium on Cognitive Neuroscience (ISCN), HK

2000 650th Anniversary Trust Fund, The Queen’s College, University of Oxford, UK

1999~2001 McDonnell-Pew Studentships, Centre for Cognitive Neuroscience, University of
Oxford, UK

References

Professor Robert Desimone
Member, National Academy of Sciences, USA

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Professor Norden E. Huang
Academician, Academia Sinica
Member, National Academy of Engineering

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Professor Jin Fan

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Professor Jeffrey Schall

E. Bronson Ingram Professor of Neuroscience
Director, Center for Integrative & Cognitive Neuroscience
Director, Vanderbilt Vision Research Center
Department of Psychology
Wilson Hall, Vanderbilt University
Nashville, 37240, TN, USA

Tel: +1 615-322-0868
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Patents:

1. 頭顱電刺激的系統及方法：中華民國專利發明第 I581818 號。(May, 2017)

Book:

1. Learn to Read & Read to Learn (2010). By Jun-Ren Lee, **Chi-Hung Juan** et al., Hsin-Yi Foundation Publisher, Taipei, Taiwan (ISBN 978-986-161-401-4) (**Citations: 5 (Gs)**).

Journal articles: (* denotes corresponding author; citations updated on 14 January, 2020)

1. Feng, XJ, Huang, Y-T, Huang, Y-Z, Kuo, CW, Peng, CW, Rotenberg, A., Juan, CH, Pei, YC, Chen, YH, Chen, KY, Chiang, YH, Liu, HH, Wu, JX, Hsieh, TH. (2020, May). Early transcranial direct current stimulation treatment exerts neuroprotective effects on 6-OHDA-induced Parkinsonism in rats. *Brain Stimulation*, 13(3): 655-663. MOST 108-2639-H-008-001-ASP.
2. Li, CT, Cheng, CM, Chen, MH, Juan, CH, Tu, PC, Bai, YM, Jeng, JS, Lin, WC, Tsai, SJ, Su, TP. (2020, Mar). Antidepressant Efficacy of Prolonged Intermittent Theta Burst Stimulation Monotherapy for Recurrent Depression and Comparison of Methods for Coil Positioning: A Randomized, Double-Blind, Sham-controlled Study. *Biological Psychiatry*, S0006-3223(19)31583-5. MOST 108-2321-B-075-004-MY3.
3. Liu, HH, He, XK, Chen, HY, Peng, CW, Rotenberg, A., Juan, CH, Pei, YC, Liu, HL, Chiang, YH, Wang, JY, Feng, XJ, Huang, YZ, Hsieh, TH. (2019, Dec). Neuromodulatory Effects of Transcranial Direct Current Stimulation on Motor Excitability in Rats. *Neural Plasticity*, Volume 2019, Article ID 4252943, 1-9.
4. Nguyen, K., Liang, WK, Muggleton, N. G., Huang, N. E., Juan, CH*. (2019, Dec). Human visual steady-state responses to amplitude-modulated flicker: Latency measurement. *Journal of Vision*, 19(14):14, 1–17. 本人為第一作者、通訊作者。
5. Nguyen, K., Liang, WK, Lee, V., Chang, WS, Muggleton, N. Yeh, JR, Huang, N. E. and Juan, CH*. (2019, Nov). Unraveling nonlinear electrophysiologic processes in the human visual system with full dimension spectral analysis. *Scientific Reports*, 9(1):16919, 1-13. 本人為第一作者、通訊作者。
6. Wang, JJ, Tseng, P, Juan, CH, Frisson, S, Apperly, IA. (2019, Nov). Perspective-taking across cultures: shared biases in Taiwanese and British adults. *Royal Society Open Science*, 6 (11), 190540. .
7. Jaiswal, S, Muggleton, N.G., Juan, CH, Liang, WK. (2019, Oct). Indices of association between anxiety and mindfulness: a guide for future mindfulness studies. *Personality Neuroscience*, Vol 2: e9, 1–11.
8. Jaiswal, S, Tsai, SY, Juan, CH, Muggleton, N.G., Liang, WK. (2019, Aug). Low delta and high alpha power are associated with better conflict control and working memory in high mindfulness, low anxiety individuals. *Social Cognitive and Affective Neuroscience*, 14(6):645-655.
9. Chuang KY, Chen, YH, Balachandran, P., Liang, WK and Juan, CH*. (2019, Apr). Revealing the electrophysiological correlates of working memory-load effects in symmetry span task

with HHT method. *Frontiers in Psychology*, 10:855. 本人為第一作者、通訊作者。

10. Li, CT, Chen MH, Juan, CH, Liu, RS, Lin, WC, Bai, YM, Su, TP. (2018, Sep). Effects of prefrontal theta-burst stimulation on brain function in treatment-resistant depression: A randomized sham-controlled neuroimaging study. *Brain stimulation*, 11(5):1054-1062.
11. Tseng, Philip*, Wang, MC, Lo, YH and Juan, CH*. (2018, Jun). Anodal and cathodal tDCS over the right frontal eye fields impacts spatial probability processing differently in pro- and anti-saccades. , (Corresponding Author; SCI, IF: 3.877; Ranking: 77/261 (Neurosciences)). . *Frontiers in Neuroscience*, 12:421. 本人為第一作者、通訊作者。
12. Jaiswal, S., Tsai, SY, Juan, CH, Liang, WK, Muggleton, N.G. (2018, May). Better cognitive performance is associated with the combination of high trait mindfulness and low trait anxiety.. *Frontiers in Psychology*, 9:627.
13. Tsai, S. Y., Jaiswal, S., Chang, C. F., Liang, W. K., Muggleton, N. G., Juan, C. H*. (2018, May). Meditation effects on the control of involuntary contingent reorienting revealed with electroencephalographic and behavioral evidence. . *Frontiers in Integrative Neuroscience*, 12(17): 1-14. 本人為第一作者、通訊作者。
14. Philip Tseng, Kai-Chi Iu & Chi-Hung Juan (2018, Jan). The critical role of phase difference in theta oscillation between bilateral parietal cortices for visuospatial working memory. *Scientific Reports*, In Press. (SCI). MOST 106-2628-H-008-002-MY4.
15. Chung HK, Sjöström T, Lee HJ, Lu YT, Tsuo FY, Chen TS, Chang CF, Juan CH, Kuo WJ, Huang CY (2017, Nov). Why Do Irrelevant Alternatives Matter? An fMRI-TMS Study of Context-Dependent Preferences. *Journal of Neuroscience*, doi: 10.1523/JNEUROSCI.2307-16.2017. (SCI).
16. Tsai, YC., Lu, HJ., Chang, CF., Liang, WK., Muggleton, NG., Juan, CH*. (2017, Jun). Electrophysiological and behavioral evidence reveals the effects of trait anxiety on contingent attentional capture. *Cognitive, Affective, & Behavioral Neuroscience*. (SCI, 12/51 (Behavioral Sciences) & 103/258 (Neurosciences)). MOST 103-2410-H-008-023-MY3. 本人為通訊作者。
17. Li, CT., Lu, CF., Lin, HC., Huang, YZ., Juan, CH., Su, TP., Bai, YM., Chen, MH., Lin WC. (2017, May). Cortical inhibitory and excitatory function in drug-naïve generalized anxiety disorder. *Brain Stimulation*, 10(3):604-608. (SCI, (19/185 (Clinical Neurology) & 41/239 (Neurosciences))).
18. Chi-Hung Juan, Philip Tseng and Tzu-Yu Hsu (2017, Apr). Elucidating and modulating the neural correlates of visuospatial working memory via noninvasive brain stimulation. *Current Directions in Psychological Science*, 26(2):165-173. (SCI, 11/101 (Psychology Multidisciplinary)). MOST 103-2410-H-008-023-MY3. 本人為第一作者、通訊作者。
19. Hui-Yan Chiau, Neil G. Muggleton, Chi-Hung Juan (2017, Jan). Exploring the contributions of the supplementary eye field to subliminal inhibition using double-pulse transcranial magnetic stimulation. *Human Brain Mapping*, 38(1):339-351. (SCI, 2/14 (Neuroimaging); 8/124 (Radiology Nuclear Medicine & Medical Imaging); 38/256 (Neurosciences)). MOST 103-2410-H-008-023-MY3. 本人為通訊作者。
20. Tzu-Yu Hsu, Chi-Hung Juan, Philip Tseng (2016, Dec). Individual Differences and State-dependent Responses in Transcranial Direct Current Stimulation. *Frontiers in Human*

Neuroscience, 10: 643. (SCI, Ranking: 13/76 (Psychology), 85/251(Neurosciences)).

21. Wu, YJ, Tseng, P, Huang, HW, Hu, JF, Juan, CH, Hsu, KS, Lin, CC (2016, Sep). The facilitative effect of transcranial direct current stimulation on visuospatial working memory in patients with diabetic polyneuropathy: a pre-post sham-controlled study. *Frontier in Human Neuroscience*. (SCI, Ranking: 13/76 (Psychology), 85/251(Neurosciences)).
22. Philip Tseng, Yu-Ting Chang, Chi-Fu Chang, Wei-Kuang Liang, Chi-Hung Juan (2016, Aug). The critical role of phase difference in gamma oscillation within the temporoparietal network for binding visual working memory. *Scientific Reports*, 6:32138 | DOI: 10.1038/srep32138. (SCI, 7/63 (Multidisciplinary Sciences)). MOST 102-2420-H-008-001-MY3. 本人為通訊作者.
23. Cheng-Ta Li, Chi-Hung Juan, Tung-Ping Su, Ying-Jay Liou, Mu-Hong Chen, Chih-Ming Cheng and Ying-Zu Huang (2016, Jul). Transcranial Magnetic Stimulation-Derived Motor Parameters and Regional Glucose Metabolism of Motor Cortex. *Journal of Neurology & Neurophysiology*, 7: 386.
24. Chang, CF., Liang, WK., Lai, CL., Hung, DL. & Juan, C.H. (2016, Jun). Theta oscillation reveals the temporal involvement of different attentional networks in contingent reorienting. *Frontier in Human Neuroscience*, Front. Hum. Neurosci. | doi: 10.3389/fnhum.2016.00264. (SCI, 13/76 (Psychology), 85/251(Neurosciences)). MOST 103-2410-H-008-023-MY3. 本人為通訊作者.
25. Chih-Ming Cheng, Chi-Hung Juan, Mu-Hong Chen, Chi-Fu Chang, Hsin Jie Lu, Tung-Ping Su, Ying-Chiao Lee, Cheng-Ta Li (2016, Apr). Different forms of prefrontal theta burst stimulation for executive function of medication- resistant depression: Evidence from a randomized sham controlled study. *Progress in Neuropsychopharmacology & Biological Psychiatry*, 66:35-40. (SCI, 36/140, Psychiatry). MOST 103-2410-H-008-023-MY3.
26. Norden E. Huang, Kun Hu, Albert C. C. Yang, Hsing-Chih Chang, Deng Jia, Wei-Kuang Liang, Jia Rong Yeh, Chu-Lan Kao, Chi-Hung Juan, Chung Kang Peng, Johanna H. Meijer, Yung-Hung Wang, Steven R. Long and Zhauhua Wu (2016, Mar). On Holo-Hilbert spectral analysis: a full informational spectral representation for nonlinear and non-stationary data. *Philosophical Transactions of The Royal Society A: Mathematical, Physical and Engineering Sciences*, DOI: 10.1098/rsta.2015.0206. (SCI, 11/56, Multidisciplinary Sciences).
27. Ping-I Lin, Cheng-Da Hsieh, Chi-Hung Juan, Md Monir Hossain, Craig A. Erickson, Yang-Han Lee, Mu-Chun Su (2016, Feb). Predicting Aggressive Tendencies by Visual Attention Bias Associated with Hostile Emotions. *PLOS ONE*, PLOS ONE | DOI:10.1371/journal.pone.0149487. (SCI).
28. Hon Wah Lee; Ming-Shan Lu; Chiao-Yun Chen; Neil G Muggleton; Tzu-Yu Hsu; Chi-Hung Juan (2016, Jan). Roles of the pre-SMA and rIFG in conditional stopping revealed by transcranial magnetic stimulation. *Behavioural Brain Research*, 296:459-67. (SCI, 18/51 Behavioral Sciences). MOST 103-2410-H-008-023-MY3. 本人為通訊作者.
29. Qiong Wu, Chi-Fu Chang, Sisi Xi, I-Wen Huang, Zuxiang Liu, Chi-Hung Juan, Yanhong Wu, Jin Fan (2015, Nov). A critical role of temporoparietal junction in the integration of top-down and bottom-up attentional control. *Human Brain Mapping*, 36(11):4317-33. (SCI, 2/14 (Neuroimaging); 5/125 (Radiology Nuclear Medicine & Medical Imaging); 27/252

- (Neurosciences)). MOST 103-2410-H-008-023-MY3. 本人為通訊作者.
30. Jiaxin Yu, Philip Tseng, Daisy L. Hung, Shih-Wei Wu & Chi-Hung Juan (2015, Oct). Brain stimulation improves cognitive control by modulating medial-frontal activity and preSMA-vmpFC functional connectivity. *Human Brain Mapping*, 36(10):4004-15. (SCI, 2/14 (Neuroimaging); 5/125 (Radiology Nuclear Medicine & Medical Imaging); 27/252 (Neurosciences)). MOST 103-2410-H-008-023-MY3. 本人為通訊作者.
 31. Cheng-Ta Li, Jen-Chuen Hsieh, Hsiang-Hsuan Huang, Mu-Hong Chen, Chi-Hung Juan, Pei-Chi-Tu, Ying-Chiao Lee, Shyh-Jen Wang, Chih-Ming Cheng, Tung-Ping Su (2015, Jul). Cognition-Modulated Frontal Activity in Prediction and Augmentation of Antidepressant Efficacy: a Randomized Sham-Controlled Pilot Study. *Cerebral Cortex*, doi:10.1093/cercor/bhu191. (SCI, 16/251, Neurosciences). MOST 101-2628-H-008-001-MY4.
 32. Hon Wah Lee, Yu-Hui Lo, Kuan-Hui Li, Wen-Shin Sung and Chi-Hung Juan (2015, Jun). The relationship between the development of response inhibition and intelligence in preschool children. *Frontiers in Psychology*, Volume 6: Article 802: 1-10. (SCI, 20 out of 127 in Multidisciplinary Psychology). MOST 102-2420-H-008-001-MY3. 本人為通訊作者.
 33. Chen C-Y, Muggleton NG, Juan C-H (2015, May). Attentional biases to emotion in impulsive and instrumental violent offenders: an event-related potential study. *Journal of Forensic Psychiatry and Psychology*, 26(2): 202-223. (SSCI, 36/52, Criminology & Penology).
 34. David Moreau, Chun-Hao Wang, Philip Tseng and Chi-Hung Juan (2015, May). Blending transcranial direct current stimulations and physical exercise to maximize cognitive improvement. *Frontiers in Psychology*, May 2015|Volume6|Article678. (SCI, 20 out of 127 in Multidisciplinary Psychology). MOST 104-2420-H-008-001-MY2.
 35. Wang, C. H., Liang, W. K., Tseng, P., Muggleton, N., Juan, C. H., & Tsai, C. L. (2015, Apr). The relationship between aerobic fitness and neural oscillations during visuo-spatial attention in young adults. *Experimental Brain Research*, 233(4):1069-78. (SCI, 171/252 in Neurosciences). MOST 102-2410-H-008-021-MY3.
 36. Fregni, F., Nitsche, M. A., Loo, C., Brunoni, A. R., Marangolo, P., Leite, J., Carvalho, S., Bolognini, N., Caumo, W., Paik, N. J., Simis, M., Ueda, K., Hamed, E., Luu, P., Tucker, D. M., Tyler, W. J., Brunelin, J., Datta, A., Juan, C. H., Venkatasubramanian, G., Boggio, P. S., and Bikson, M.. (2015, Mar). Regulatory considerations for the clinical and research use of transcranial direct current stimulation (tDCS): Review and recommendations from an expert panel. *Clinical Research and Regulatory Affairs*, 32(1): 22–35. MOST 101-2811-H-008-014.
 37. Ko, YT, Cheng, SK, Juan, CH. (2015, Mar). Voluntarily-generated unimanual preparation is associated with stopping success: evidence from LRP and lateralized mu ERD before the stop signal. *Psychological Research*, 79(2):249-58. (SSCI, 26/83, Psychology, Experimental)). MOST 102-2420-H-008-001-MY3.
 38. Wang, CH, Tsai, CL, Tu, KC, Muggleton, N., Juan, CH and Liang WK. (2015, Mar). Modulation of Brain Oscillations during Fundamental Visuo-spatial Processing: A Comparison between Female Collegiate Badminton Players and Sedentary Controls. *Psychology of Sport and Exercise*, 16(3):121-129. (SCI, 44/74 in Psychology). MOST 102-2420-H-008-001-MY3.
 39. Zude Zhu, Brian T. Gold, Chi-Fu Chang, Suiping Wang, Chi-Hung Juan (2015, Feb). Left

middle temporal and inferior frontal regions contribute to speed of lexical decision: A TMS study. *Brain and Cognition*, 93: 11-17. (SCI, 143/252 in Neurosciences). MOST 99-2410-H-008-022-MY3. 本人為通訊作者.

40. J Zhao, W Liang, CH Juan, L Wang, S Wang, Z Zhu (2015, Jan). Dissociated stimulus and response conflict effect in the Stroop task: Evidence from evoked brain potentials and brain oscillations. *Biological Psychology*, 104:130-8. (SCI, 11/49 in Behavioral Sciences). MOST 99-2410-H-008-022-MY3.
41. Jiabin Yu, Philip Tseng, Neil G. Muggleton and Chi-Hung Juan (2015, Jan). Being watched by others eliminates the effect of emotional arousal on inhibitory control. *Frontiers in Psychology*, Volume 6: Article 4. (SSCI, 20/129 in Psychology, Multidisciplinary). MOST 102-2420-H-008-001-MY3. 本人為通訊作者.
42. Chen, N.-F., Juan, C.-H., Muggleton, N., & Cheng, S.-K. (2014, Dec). Recognition Memory Performance is modulated by Transcranial Direct Current Stimulation over the Left Posterior Parietal Cortex. . *Journal of Neuroscience and Neuroengineering*. , 3(2):92-100(9).
43. Chun-Hao Wang; Chia-Liang Tsai; Philip Tseng; Albert C. Yang; Men-Tzung Lo; Chung-Kang Peng; Hsin-Yi Wang; Neil G. Muggleton; Chi-Hung Juan; Wei-Kuang Liang (2014, Dec). The association of physical activity to neural adaptability during visuo-spatial processing in healthy elderly adults: A multiscale entropy analysis. *Brain and Cognition*, 92; 73-83. (SCI, 143/252 in Neurosciences). MOST 103-2410-H-008-023-MY3.
44. Indra T Mahayana, Hartono, Lili Tcheang, Chiao-Yun Chen, Chi-Hung Juan, Neil G Muggleton (2014, Dec). Posterior parietal cortex and visuospatial control in near and far space. *Translational Neuroscience*, 5(4): 269-274. (SCI). MOST 103-2410-H-008-023-MY3.
45. Yi-Jen Wu, Philip Tseng, Chi-Fu Chang, Ming-Chyi Pai, Kuei-Sen Hsu, Chou-Ching Lin, Chi-Hung Juan (2014, Nov). Modulating the Interference Effect on Spatial Working Memory by Applying Transcranial Direct Current Stimulation over the Right Dorsolateral Prefrontal Cortex. *Brain and Cognition*, 91: 87–94. (SCI). MOST 103-2410-H-008-023-MY3. 本人為通訊作者.
46. Indra T. Mahayana, Dwi C. R. Sari, Chi-Hung Juan and Neil G Muggleton (2014, Oct). The potential of Transcranial Magnetic Stimulation for population based application: a region based illustrated brief overview. *International Journal of Neuroscience*, 124(10):717-23. (SCI). NSC 100-2410-H-008-074-MY3.
47. Indra Tri Mahayana, Lili Tcheang, Chia-Yun Chen, Chi-Hung Juan, Neil G Muggleton (2014, Sep). The precuneus and visuospatial attention in near and far space: a transcranial magnetic stimulation study. *Brain Stimulation*, 7(5):673-9. (SCI, 19/185 (Clinical Neurology) & 41/239 (Neurosciences)). MOST 100-2410-H-008-074-MY3.
48. Lin-Yuan Tseng; Philip Tseng; Wei-Kuang Liang; Daisy L Hung; Ovid Tzeng; Neil G Muggleton; Chi-Hung Juan (2014, Sep). The role of superior temporal sulcus in the control of irrelevant emotional face processing: A transcranial direct current stimulation study. *Neuropsychologia*, 64:124-133. (SCI, 13/49, Behavioral Sciences). MOST 103-2410-H-008-023-MY3. 本人為通訊作者.
49. Tzu-Yu Hsu, Philip Tseng, Wei-Kuang Liang, Shih-Kuen Cheng, and Chi-Hung Juan (2014,

- Sep). Transcranial direct current stimulation over right posterior parietal cortex changes prestimulus alpha oscillation in visual short-term memory task. *Neuroimage*, 98:306–313. (SCI, 2/14 (Neuroimaging), 26/251 (Neurosciences) & 3/120(Radiology, Nuclear Medicine & Medical imaging)). MOST 102-2420-H-008-001-MY3. 本人為通訊作者.
50. Cheng-Ta Li, Mu-Hong Chen, Chi-Hung Juan, Hsiang-Hsuan Huang, Li-Fen Chen, Jen-Chuen Hsieh, , Pei-Chi Tu, Ya-Mei Bai, Shin-Jen Tsai, Ying-Chiao Lee, Tung-Ping Su. (2014, Jul). Efficacy of Prefrontal Theta-Burst Stimulation in Refractory Depression: A Randomized Sham-Controlled Study. *Brain*, 137: 2088-2098. (SCI, 10/250, Neurosciences).
 51. Philip Tseng, Jiaxin Yu, Ovid J.L. Tzeng, Daisy L.Hung and Chi-Hung Juan (2014, Jun). Hand proximity facilitates spatial discrimination of auditory tones. *Frontiers in Psychology*, VOL 5, ARTICLE 527. (SCI). MOST 101-2628-H-008-001-MY4.
 52. Wei-Kuang Liang; Men-Tzung Lo; Albert C Yang; Chung-Kang Peng; Shih-Kuen Cheng; Philip Tseng; Chi-Hung Juan* (2014, Apr). Revealing the brain's adaptability and the transcranial direct current stimulation facilitating effect in inhibitory control by multiscale entropy. *Neuroimage*, 90 (2014) 218–234. (SCI, Ranking: 2/14 (Neuroimaging), 26/251 (Neurosciences) & 3/120(Radiology, Nuclear Medicine & Medical imaging);). NSC 99-2410-H-008-022-MY3. 本人為通訊作者.
 53. Indra T. Mahayana, Michael J. Banissy, Chiao-Yun Chen, Vincent Walsh, Chi-Hung Juan and Neil G. Muggleton (2014, Feb). Motor empathy is a consequence of misattribution of sensory information in observers. *Frontier in Human Neuroscience*, February2014|Volume8|Article47 | 1-7. (SCI, 20/75(Psychology), 123/251(Neurosciences)).). NSC 100-2410-H-008-074-MY3.
 54. Mahayana, I, Liu, CL, Chang, CF, Hung, DL, Tzeng, O, Juan, CH and Muggleton, NG. (2014, Feb). Far space neglect in conjunction but not feature search following transcranial magnetic stimulation over right posterior parietal cortex. *Journal of Neurophysiology*, 111(4):705-14. NSC 100-2410-H-008-074-MY3.
 55. Ovid J.-L. Tzeng, Chia-Ying Lee, Jun Ren Lee, Denise H. Wu, Chi-Hung Juan, Shih-Kuen Cheng, Rose R. W. Lee, Chih-Mao Huang, Nissen W.-J. Kuo, Erik C. Chang, and Daisy L. Hung (2013, Sep). Cognitive Neuroscience in the 21st Century: A Selective Review of Prominent Research Topics and Applications. *Journal of Neuroscience and Neuroengineering*. NSC 102-2420-H-008-001-MY3.
 56. Lee HW* and Juan CH* (2013, Aug). What can cognitive neuroscience do to enhance our understanding of education and learning? *Journal of Neuroscience and Neuroengineering*, 2(4):393-399(7). NSC 100-2511-S-008-019. 本人為通訊作者.
 57. Liang, W. K.* and Juan, C. H* (2013, Aug). Changes when the brain is stimulated by current. *Journal of Neuroscience and Neuroengineering*, 2(4):382-386(5). NSC 99-2410-H-008-022-MY3. 本人為通訊作者.
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your will. *Vision Research*, Mar 21; 60C:34-39. (SCI, 145/239 (Neurosciences); 17/56 (Ophthalmology)). NSC 99-2410-H-008-022-my3. 本人為通訊作者.

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95. 王心怡、王駿濠、阮啟弘 (2016 年 06 月)。網球運動經驗對動作準備歷程的影響。 **體育學報**，49 卷第 S 期，頁 61~74。(TSSCI)。科技部：104-2420-H-008-001-MY2。
96. Hui-Yan Chiau and Chi-Hung Juan (2014 年 03 月)。經顱磁刺激及經顱直流電刺激於認知神經科學與復健醫療之應用。 **物理治療**，39 卷 1 期 (2014/03), 1-9。科技部：101-2628-H-008-001-MY4。本人為通訊作者。
97. 張哲千, 王駿濠, 阮啟弘 (2014 年 03 月)。健身運動對動作準備歷程影響。 **中華體育季刊**，第 28 卷第 1 期，頁 53-62。
98. 徐慈妤, 洪蘭, 曾志朗, 阮啟弘* (2013 年 09 月)。台灣認知神經科學研究的崛起: 以注意力相關研究為例。 **中華心理學刊**，Vol.55, No.3, 343-357。(TSSCI)。國科會：101-2628-H-008-001-MY4。本人為通訊作者。
99. 張武業、施俊名、王駿濠、阮啟弘 (2013 年 03 月)。優秀足球運動員抑制控制的特性：有氧運動能力的重要性。 **大專體育學刊**，15(1): 40-53。(TSSCI)。
100. 王駿濠, 張哲千, 梁衍明, 邱文聲, 洪蘭, 曾志朗, 阮啟弘* (2012 年 06 月)。運動對孩童認知功能及學業表現的影響：文獻回顧與展望。 **教育科學研究期刊**。(TSSCI)。國科會：99-2410-H-008-022-MY3。本人為通訊作者。
101. 林宜親, 李冠慧, 宋玟欣, 柯華歲, 曾志朗, 洪蘭, 阮啟弘* (2011 年 03 月)。以認知神經科學取向探討兒童注意力的發展和學習之關聯。 **教育心理學報**，Mar; 42(3), 517-542。(TSSCI)。國科會：97-2511-S-008-005-MY3。本人為通訊作者。
102. 阮啟弘*, 呂岱樺, 陳巧雲 (2005 年 12 月)。跨顱磁刺激在認知神經科學研究的應用。 **應用心理研究**，28 期, P51-P74。(其它)。國科會：94-2413-H-008-001。
103. 阮啟弘*, 呂岱樺, 劉佳蓉, 陳巧雲 (2005 年 12 月)。視覺注意力的研究議題與神經生理機制。 **應用心理研究**，28 期, P.25-P.50。(其它)。國科會：93-2413-H-008-003。

RESEARCH GRANTS

■ PI/CO-PI in research project, Ministry of Science and Technology, TAIWAN

(108-2639-H-008-001 -ASP; Aug 2019~Jul 2024; USD 1,666,666)

Title: Investigation of neural mechanisms of attention, working memory and cognitive control and theory construction.

(108-2321-B-075-004-MY2; Jun 2019~Dec 2020; USD 516,129) CO-PI

Title: Brain and mind technology in emotion: Investigation of neuropsychiatric traits with electrophysiology, brain imaging, artificial intelligence and transcranial magnetic stimulation in the domains of diagnosis, modulation and treatment.

(107-2410-H-008-040-MY3; Aug 2018~Oct, 2019; USD 71,758)

Title: Using nonlinear visual stimulation and dynamical data analysis to investigate the temporal characteristics of information processing in human visual system.

(106-2628-H-008-002-MY4; Aug 2017~Oct, 2019; USD 151,661)

Title: Neural Mechanisms and Modulations of Impulse Control: A Cognitive Neuroscience Approach.

(104-2745-B-008-002-; Oct 2015~Sep 2016; USD 40,625)

Title: Integration of electroencephalography (EEG) and Holo-Hilbert Spectral Analysis (HHSA) in the investigation of neurodegenerative cognitive decline.

(103-2410-H-008-023-MY3; Aug 2014~Jul 2017; USD 102,500)

Title: Probing the intertwined neural mechanisms of visual attention, probability and reward with neuroimaging techniques and mathematical modeling.

(102-2420-H-008-001-MY3; Jan 2013~Dec 2015; USD 100,733)

Title: An integrated approach in investigating emotion, motivation, and cognitive control using fMRI: revealing the underlying neural mechanisms and potential applications to society.

(101-2628-H-008-001-MY4; Aug 2012~Jul 2016; USD 185,600)

Title: The neural mechanisms of attentional control, reorienting, and enhancement, and their effects on visual working memory.

(100-2511-S-008-019; Aug 2011~Oct 2012; USD 26,400)

Title: The relationship between pre-schoolers' attention development and mathematical learning –Norms and mechanism of cognitive neuroscience.

(99-2410-H-008-022-MY3; Aug 2010~Jul 2013; USD 160,000)

Title: Using Transcranial Magnetic Stimulation, Mathematical Modeling and Neuroimaging techniques to investigate probability and predictability effects on visual search and attentional control.

(97-2511-S-008-005-MY3; Aug 2008~Jul 2010; USD 100,000)

Title: Investigating the training effect of a computerized attentional program in facilitating cognitive abilities of Taiwanese children- A study from Cognitive Neuroscientific perspective.

(96-2413-H-008-003-MY3; Aug 2007~Jul 2009; USD 100,000)

Title: Probing the dissociation of spatial attention and saccade preparation in the temporal domain and in the underlying neural mechanisms.

(93-2413-H-008-003; 94-2413-H-008-001; Aug 2004~Jul 2006; USD 80,000)

Title: Probing the neural mechanism of visual search with Transcranial Magnetic Stimulation.

■ PI in research project, Ministry of Education, TAIWAN

(Jun 2019~Dec 2019; USD 73,333) Taiwan-Oxford University Academic Strategic Alliance Grant

Title: Integrative research combining artificial intelligence and brain science: using deep-learning algorithms and dynamic time-frequency analysis to improve diagnoses and interventions of neuropsychiatric diseases.

(Jan 2018~Dec 2018; USD 96,666) Taiwan-Oxford University Academic Strategic Alliance Grant

Title: Using Electroencephalography/Magnetoencephalography and dynamic data analysis to improve the efficacies of diagnostic/interventional tools in psychiatric and neurological disorders.

■ Co-PI in theme project, Academia Sinica, TAIWAN

(AS-105-TP-C02, Jan 2016~Dec 2018; USD 468,750)

Title: To optimize mental capital and well-being in children and elders through brain science technologies and intervention.

(AS-94-TP-C06, Jan 2005~Dec 2007; USD 910,000)

Title: Word Recognition: Integrated Research of Behavioral, Developmental & Neurobiological approach.

■ Co-PI in the Program for Promoting Academic Excellence of Universities (Phase II), TAIWAN

(94-2752-H-010-003-PAE, 4 years; USD 760,000)

Title: Brain Processing in a Diversified Linguistic Environment: A Taiwan Perspective

ACADEMIC SERVICES

■ Editorial Board

Journal of Applied Psychology (應用心理學研究)

The Bulletin of Educational Psychology (教育心理學報)

Frontiers in Psychology (Review Editor in Consciousness Research), 2015

Frontiers in Integrative Neuroscience (Review Editor)

Frontiers in Integrative Neuroscience (Associate Editor)

■ Ad hoc reviewer of Journals:

Psychological Review, PNAS, Cerebral Cortex, Brain Stimulation, NeuroImage, Journal of Neuroscience, Human Brain Mapping, Cortex, Neuroscience Letters, Journal of Cognitive Neuroscience, European Child & Adolescent Psychiatry, PLoS ONE, European Journal of Neuroscience, Journal of Neurophysiology, Experimental Brain Research

■ Grant Reviewer:

Biotechnology and Biological Sciences Research Council (BBSRC), UK

National Science Council, Research Panel Committee Member

National Science Council, Research Proposal Referee

Academia Sinica: reviewer for recruitment of new faculty

Taipei Veterans Hospital, Medical Research & Education, Research Proposal Referee

■ International Professorship Reviewer:

1. Assistant to Associate Professor,

Psychology Department at the University of California, Davis, USA

2. Associate to Full Professor, Assistant to Associate Professor,

Psychology Department at Queens College of the City University of New York, USA

3. Reader to Full Professor,

Department of Psychology, Durham University, UK

4. Reader to Full Professor,

Department of Psychology, Goldsmiths, University of London, UK

■ Steering and Evaluation Committee for “International Scholarship for Higher Education” in the Ministry of Education, Taiwan

■ Conferences Organizer/ Moderator:

Date	Conference/Venue	Position
2019/11/27	“Taiwan/Oxford Symposium of Cognitive Neuroscience and Nonlinear data analysis”	Chair Organizer
2019/01/26	“Symposium: The Nonlinear Analytical Methods and The Investigation of Cognitive Function with Noninvasive Brain Stimulation”	Moderator
2018/09/15	“Symposium of Working Memory and Non-invasive Brain Stimulation Applications”	Chair Organizer
2018/05/21	“Symposium for brain functions & EEG/MEG analytical methods”	Chair Organizer
2016/01/23	“Taiwan Society of Cognitive Neuroscience 2016 Annual Meeting” Mini-Symposium C: Attention and Working Memory	Chair Organizer
2012/11/04	“A mini symposium on learning, memory & decision-making”	Organizing committee
2012/05/01	“The Opening Ceremony for Taiwan Mind & Brain Imaging Center”	Organizing committee
2010/07/23~26	“2010 Asia-Pacific Conference on Vision”	Local committee member
2004/08/16~09/03 2005/08/03~07 2006/07/04~08 2007/07/09~12 2008/07/24~25 2009/07/04~05 2010/07/12~14 2011/07/05~07 2012/07/03~06 2013/07/03~05 2014/09/09~13 2015/08/24~28 2016/08/24~28 2017/08/25~29	“The Summer School in Cognitive Neuroscience in Taiwan” (an annual event)	Organizing committee member
2005/12/12~14	“The International Conference of Cognitive Neuroscience, Taiwan and The Academia Sinica MEG Laboratory Opening Ceremony”	Executive committee member

■ Invited talks at International Conferences/Symposiums/ Seminars

Date	Conference/Venue	Talk Title
2019/11/27	Academic Strategic Alliance: Taiwan and Oxford University – Taiwan/Oxford Symposium of Cognitive Neuroscience and Nonlinear data analysis / Experimental Psychology department, Univ. of Oxford, UK	Dynamic cross frequency coupling of neuronal oscillations revealed with the Holo-Hilbert Spectral Analysis
2019/05/19	中科院 SELF+Guangzhou 讲坛暨两岸及港澳地区科技创新论坛 / 广东科学中心, (廣州, 中國)	大腦的發展與潛能
2018/12/13	Academic forum of Academic Strategic Alliance: Taiwan and Oxford University	“The applications of Holo-Hilbert spectrum analysis in brain sciences”

	／Doctorow Hall, St Edmund Hall, Queen's Lane, Oxford, OX1 4AR (Oxford, UK)	
2018/09/05~09/09	The 12th International Conference on Complex Medical Engineering (2018 ICME) ／Matsue Terrsa, Shimane, Matsue City, Japan	“The effect of the theta burst TMS revealed in brain oscillations of Treatment-Resistant Depression patients”
2018/07/19~07/22	Multi-Modal Neuroimaging Workshop Beijing, China	The developments and applications of non-invasive brain stimulation in brain science
2018/05/31~06/02	South China Normal University	“The application of non-invasive stimulation in cognitive neuroscience”
2017/10/12~13	The Chinese Neuroscience Society Meeting , Tianjin (Tianjin, China)	“The applications of TMS in visual attention and cognitive control”
2017/05/21~24	International Workshop on Brain, Language and Cognition ／Kuang Yaming Honors School, Nanjing University (Nanjing, China)	“Elucidating and Modulating the Neural Correlates of Visual Working Memory via Noninvasive Brain Stimulation (TMS, tDCS and tACS) and EEG”
2017/01	National Institute on Drug Abuse (NIDA), Intramural Research Program, Baltimore, USA	“Using Non-Invasive Brain stimulation techniques to investigate inhibitory control and visual working memory”
2016/12/02~04	International Conference of Cognitive Control ／South China Normal University School of Psychology (Guangzhou, China)	“Probing the neural correlates of inhibitory control with noninvasive transcranial magnetic stimulation (TMS), transcranial direct current stimulation (tDCS), electroencephalography (EEG) and fMRI”
2016/08/04~06	2016 ICME International Conference, Session Title: The role of non-invasive brain stimulation in cognitive neuroscience ／Department of Neurology, Dokkyo Medical University (Tochigi, Japan)	“Revealing the neural mechanisms of visual working memory with transcranial direct/alternating current stimulation and adaptive electroencephalographic spectral analysis”
2016/04/06	Oxford Centre for Human Brain Activity, University of Oxford (Oxford, UK)	“Deciphering the nonlinear processes in visual working memory with Holo-Hilbert Spectrum Analysis”
2015/09/09	Decision and Action Laboratory, University of Oxford (Oxford, UK)	“Unleashing potential: tDCS/tACS over the right posterior parietal cortex improves visual working memory in low-performing individuals”
2015/09/07	Oxford Centre for Human Brain Activity, University of Oxford (Oxford, UK)	“The neural mechanisms of inhibitory control revealed with transcranial direct current stimulation, EEG and fMRI ”
2015/06/15~18	8th France-Taiwan Frontiers of Science (Marseilles, France)	“Stay in control of your thought and action: Cognitive Neuroscience, Human Wellbeing and its urgency”
2011/08	Decision and Action Laboratory, Department of Experimental Psychology, University of Oxford, UK	“Probing the influence of probability in saccadic behaviors and the role of PreSMA in inhibitory control”
2011/08	Brain and Cognition Laboratory, Department of Experimental Psychology, University of Oxford, UK	“Increasing visual working memory capacity with transcranial direct current stimulation and its possible underlying electrophysiological mechanisms”

2011/05/06~08	East China Normal University (Shanghai, China)	“The Neuro-mechanism of attention control in pre-schooled children’s attention development”
2011/01/17~20	South China Normal University (Guangzhou, China)	“Using TMS and tDCS to probe visual attention and inhibitory control in human”
2010/08/17~20	The 7th International Conference on Cognitive Science, Symposium: Multimodal brain mapping methods overviews / East China Normal University (Shanghai, China)	“Investigating human inhibitory control with transcranial magnetic stimulation (TMS) and transcranial direct current stimulation (tDCS)”
2010/08/17~20	The 7th International Conference on Cognitive Science, Symposium: Cognitive Neuroscience—form Bench to Clinic / East China Normal University (Shanghai, China)	“Neurodisruptive studies of visual cognition”
2009/11/04	Department of Psychology, University of Southern California, USA	“Probing functional roles of the frontal eye fields in visual selection and inhibitory control with Transcranial Magnetic Stimulation”
2007	Department of Cognitive Sciences, University of California, Irvine, USA	“Probing temporal and causal involvements of frontal eye fields in visual selection and saccade preparation with microstimulation and TMS”
2005	European Brain and Behaviour Society, Dublin, Ireland	“On the distinction between visual selection and saccade preparation in the Frontal Eye Fields of monkeys”
2004	The 3 rd International Symposium on Cognitive Neuroscience, Hong Kong.	“Visual selection without eye movements in human visual cortices: two Transcranial Magnetic Stimulation studies”

■ Invited talks at Domestic Conferences and Seminars

Prof. Juan received lecture invitations regarding academic research or popularization of science from various places such as domestic universities, high schools and junior high schools, Judiciary, workshops, etc. The lecture topics include the following subjects: attention development and learning, TMS and tDCS applications in cognitive neuroscience and clinical medicine, cognitive control, law and cognitive neuroscience, mind and brain, brain and education, brain and artificial intelligence, etc., which has accumulated to 120 sessions.