# Curriculum Vitae William Xiang Quan Ngiam

Department of Psychology Biopsychological Research Building University of Chicago United States wngiam@uchicago.edu

**Employment** 

2019 – present Postdoctoral Research Fellow

University of Chicago (with Professor Edward Awh and Professor Edward Vogel)

**Education** 

2015 – 2019 **Doctor of Philosophy** in Psychology

University of Sydney (Supervisor: Professor Alex Holcombe)

2011 – 2014 Bachelor of Psychology (Honours)

University of Sydney (Supervisor: Dr Patrick Goodbourn)

## **Teaching and Professional Experience**

Research

2017 Statistical Assistant/Programmer on University of Sydney Strategic Education

Grant/Educational Innovation Grant; Using interactive learning to integrate statistical theory

with contemporary research practices

2017 – 2018 Research Assistant on University of Sydney Faculty of Science/Seed Funding; The

development of attentional control in children with and without anxiety

**Teaching** 

Summer 2018 Lecturer for Science and Statistics in Psychology - Introduction to Psychology

(PSYC1001), University of Sydney

2015 – 2018 **Teaching Assistant** for Statistics and Research Methods for Psychology (PSYC2012),

University of Sydney

2015, 2017 Teaching Assistant for Advanced Statistics for Psychology (PSYC3010), University of

Sydney

2016 **Teaching Assistant** for Research Methods in Honours Psychology, *University of Sydney* 

<u>Miscellaneous</u>

2021, 2022 Organizer of the Virtual Working Memory Symposium

2020 – present Founder and Organizer of the University of Chicago ReproducibiliTea Journal Club

2021 – present Steering Committee member of ReproducibiliTea

2022 Editor-in-Chief of the Journal for Reproducibility in Neuroscience

### **Honours and Awards**

2021		ONU Centenniai Trust Recipient – Newington College
2015	2010	Pagerah Training Program (PTP) Australian Covernmen

2015 – 2019 Research Training Program (RTP) – Australian Government Department of Education

and Training

2015 – 2019 Merit Award – University of Sydney

2017 **PsychFEST Award** – *University of Sydney* 

2016 Endeavour Research Fellowship – Australian Government Department of Education and

Training

2014 APS Prize – Australian Psychological Society

### **Publications**

**Ngiam, W.X.Q.,** Foster, J.J., Adam, K.C.S., Awh, E. (in prep). A signature of guessing supports an item limit in visual working memory.

**Ngiam, W.X.Q.,** Loetscher, K.B., Vogel, E.K., Awh, E. (in prep). Item-based storage revealed by whole-report for dual-feature stimuli.

**Ngiam, W.X.Q.,** Adam, K.C.S., Quirk, C., Vogel, E.K., Awh, E. (2021). Estimating the statistical power to detect set size effects in contralateral delay activity. *Psychophsyiology*, *58:e13791*. <a href="https://doi.org/10.1111/psyp.13791">https://doi.org/10.1111/psyp.13791</a>

**Ngiam, W.X.Q.,** Brissenden, J.A., Awh, E. (2019) "Memory compression" effects in visual working memory are contingent on explicit long-term memory. *Journal of Experimental Psychology: General, 148(8), 1373.* http://dx.doi.org/10.1037/xge0000649

**Ngiam, W.X.Q.,** Khaw, K.L.C., Holcombe, A.O., Goodbourn, P.T. (2019). Visual working memory for letters varies with familiarity but not complexity. *Journal of Experimental Psychology: Learning, Memory and Cognition, 45(10), 1761-1775.* http://dx.doi.org/10.1037/xlm0000682

Goodbourn, P.T., Livesey, E.J., **Ngiam, W.X.Q.**, Holcombe, A.O., Forte, J.D. (in prep.). Learning new symbolic representations of number.

Bateman, J.E., Birney, D. P., **Ngiam, W.X.Q**. (2018). Relational encoding in visual working memory: Change detection performance is better for violations in group relations. *PLOS ONE* 13(9): e0203848. https://doi.org/10.1371/journal.pone.0203848

#### **Conference Talks**

**Ngiam, W.X.Q.**, Adam, K.C.S., Quirk, C.T., Vogel, E.K., Awh, E. (2020, June). Power for detecting the presence of set size differences in the contralateral delay activity. *Virtual Working Memory Symposium*.

**Ngiam, W.X.Q.**, Khaw, K.L.C., Holcombe, A.O., Goodbourn, P.T. (2018, April). Training recognition familiarity does not improve visual working memory performance. *45<sup>th</sup> Annual Conference of the Australasian Society for Experimental Psychology*, Hobart, Australia.

**Ngiam, W.X.Q.**, Brissenden, J.A., Awh, E. (2017, April). Enhancing visual working memory performance using statistical regularities requires explicit awareness. *44<sup>th</sup> Annual Conference of the Australasian Society for Experimental Psychology*, Newcastle, Australia.

### **Conference Posters**

**Ngiam, W.X.Q.,** Loetscher, K., Vogel, E.K., Awh, E. (2020, November). Item-based storage limits revealed by whole-report for dual-feature stimuli. *61<sup>st</sup> Annual Meeting of the Psychonomic Society,* online.

**Ngiam, W.X.Q.,** Adam, K.C.S., Quirk, C., Vogel, E.K., Awh, E. (2020, November). Estimating the statistical power to detect set-size effects in the contralateral delay activity. *Object, Perception, Attention and Memory,* online.

**Ngiam, W.X.Q.,** Loetscher, K., Vogel, E.K., Awh, E. (2020, May). Object-based memories revealed by whole-report for dual-feature stimuli. 20<sup>th</sup> Annual Meeting of the Vision Sciences Society, online.

**Ngiam, W.X.Q.**, Brissenden, J.A., Awh, E. (2019, November). "Memory compression" effects in visual working memory are contingent on explicit long-term memory. 60<sup>th</sup> Annual Meeting of the Psychonomic Society, Montreal, Canada.

**Ngiam, W.X.Q.,** Awh, E., Holcombe, A. O. (2019, May). Examining the effects of memory compression with contralateral delay activity. *19<sup>th</sup> Annual Meeting of the Vision Sciences Society*, Florida, United States.

**Ngiam, W.X.Q.,** Khaw, K.L.C., Holcombe, A. O., Goodbourn, P.T. (2018, November). Training recognition familiarity is insufficient to improve visual working memory. *59<sup>th</sup> Annual Meeting of the Psychonomic Society,* New Orleans, United States.

**Ngiam, W.X.Q.**, Brissenden, J.A., Awh, E. (2017, May). Memory compression using statistical regularities requires explicit awareness. 17<sup>th</sup> Annual Meeting of the Vision Sciences Society, Florida, United States.

**Ngiam, W.X.Q.,** Goodbourn, P.T. (2016, November). Familiarity, but not visual complexity, affects letter encoding in visual working memory. *57<sup>th</sup> Annual Meeting of the Psychonomic Society*, Boston, United States.

**Ngiam, W.X.Q.**, Goodbourn, P.T. (2015, April). Encoding and capacity limits of visual working memory are not set by stimulus complexity. *42<sup>nd</sup> Annual Conference of the Australasian Society for Experimental Psychology*, Sydney, Australia.

### **Journals Reviewed For**

Journal of Experimental Psychology: Learning, Memory and Cognition, Journal of Experimental Psychology: Human Perception and Performance, Quarterly Journal of Experimental Psychology, Memory, Nature Scientific Reports, Memory and Cognition, PLoS One, Psychological Research, Neuroanatomy and Behaviour