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*

Miscellaneous

2017

2021 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

Honours and Awards

2021 Newington College – ONU Centennial Trust Recipient

2015 – 2019 Australian Government Department of Education and Training – Research Training

Program (RTP)

Scholarship to undertake a research doctorate degree, formerly known as the Australian Postgraduate Award (APA).

2015 – 2019 University of Sydney – Merit Award

Top-up scholarship to undertake a research doctorate degree.

University of Sydney – PsychFEST Award

Awarded for an excellent presentation in the School of Psychology's PsychFEST.

2016 Australian Government Department of Education and Training – Endeavour Research

Fellowship

Competitive, merit-based scholarship to undertake study and research overseas.

2014 Australian Psychological Society – APS Prize

 $\label{performing} \mbox{Awarded for being the top performing student in fourth year psychology (Honours)}.$

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*. https://doi.org/10.1111/psyp.13791

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. *45th 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. *44th 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. 61st 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. 20th 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. 60th 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. *19th 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. *59th 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. 17th 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. *57th 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. *42nd 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