

Curriculum Vitae

Cynthia S. Q. Siew, PhD

Department of Psychology
National University of Singapore

Email: cynthia@nus.edu.sg

Cell: +65 9144 3470

Website: <http://hello.csqsiew.xyz/>

Education

- 2014 - 2017 University of Kansas
- Ph.D. in Cognitive and Brain Sciences
 - Dissertation: The Phonographic Network of Language
- 2012 - 2014 University of Kansas
- M.A. in Cognitive Psychology
 - Masters Thesis: Spoken word recognition and serial recall of words from the giant component and words from lexical islands in the phonological network
- 2007 - 2011 National University of Singapore
- B.Soc.Sci., Psychology (2nd Upper Honors)
 - Honors Thesis: Joint effects of word frequency and stimulus quality on auditory lexical decision performance

Employment

- 2019 - present Assistant Professor
- Department of Psychology, National University of Singapore
- 2017 - 2019 Visiting Research Fellow
- Department of Psychology, University of Warwick
- 2017 - 2019 Senior Tutor
- Department of Psychology, National University of Singapore
 - On Academic Leave (2017-2019)
- 2015 - 2017 Assistant Instructor
- Department of Psychology, University of Kansas
- 2012 - 2015 Graduate Teaching Assistant
- Department of Psychology, University of Kansas
- 2013 - 2014 Graduate Research Assistant
- Dynamic Learning Maps Consortium, Center for Educational Testing & Evaluation, University of Kansas

Publications: Peer Reviewed

- Forbush, K. T., Swanson, T. J., Chen, Y., **Siew, C. S. Q.**, Hagan, K. E., Chapa, D. A. N., Tregarthen, J., Wildes, J. E., & Christensen, K. A. (in press). Generalized network psychometrics of eating-disorder psychopathology. *International Journal of Eating Disorders*.
- Lee, N. H., **Siew, C. S. Q.**, & Ng, N. H. N. (2022). The network nature of language endangerment hotspots. *Scientific Reports*, *12*, 10803.
- Li, Y., & **Siew, C. S. Q.** (2022). Diachronic semantic change in language influences, and is constrained by, how people use and learn language. *Memory and Cognition*. *50*, 1284-1298.
- Siew, C. S. Q.**, & Guru, A. (2022). Investigating the network structure of domain-specific knowledge using the semantic fluency task. *Memory and Cognition*. *Online First*.
- Kumar, A. M., Goh, J. Y. Q., Tan, T. H. H., & **Siew, C. S. Q.** (2022). Gender Stereotypes in Hollywood Movies and Their Evolution Over Time: Insights from Network Analysis. *Big Data and Cognitive Computing*, *6*(2), 50. DOI: 10.3390/bdcc6020050
- Siew, C. S. Q.**, Engelthaler, T., & Hills, T. T. (2022). Nymph Piss and Gravy Orgies: Local and Global Contrast Effects in Relational Humor. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *48*(7), 1047-1063.
<https://doi.org/10.1037/xlm0001120>
- *APA Editor's Choice Article*
- Siew, C. S. Q.** (2021). Global and local feature distinctiveness effects in language acquisition. *Cognitive Science*, *45*(7), e13008.
- Siew, C. S. Q.**, Yi, K., & Lee, C. H. (2021). Syllable and letter similarity effects in Korean: Insights from the Korean Lexicon Project. *Journal of Memory and Language*, *116*, 104170. DOI: <https://doi.org/10.1016/j.jml.2020.104170>.
- Siew, C. S. Q.**, & Vitevitch, M. S. (2020). Investigating the influence of inverse preferential attachment on network development. *Entropy*, *22*(9), 1029. DOI: <https://doi.org/10.3390/e22091029>
- Castro, N., Stella., M., & **Siew, C. S. Q.** (2020). Quantifying the interplay of semantics and phonology during failures of word retrieval by people with aphasia using a multiplex lexical network. *Cognitive Science*, *44*(9), e12881. DOI: 10.1111/cogs.12881
- Siew, C. S. Q.**, & Vitevitch, M. S. (2020). An investigation of network growth principles in the phonological language network. *Journal of Experimental Psychology: General*. *Online First*. DOI: 10.1037/xge0000876

- Castro, N., & **Siew, C. S. Q.** (2020). Contributions of Modern Network Science to the Cognitive Sciences: Revisiting research spirals of representation and process. *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*. DOI: 10.1098/rspa.2019.0825
- Siew, C. S. Q.** (2020). Applications of Network Science to Education Research: Quantifying Knowledge and the Development of Expertise through Network Analysis. *Education Sciences*, 10(4), 101. DOI: 10.3390/educsci10040101
- Siew, C. S. Q.** (2020). Feature distinctiveness effects in language acquisition and lexical processing. *Cognitive Processing*, Online First. DOI: 10.1007/s10339-019-00947-6
- Ooi, J., Michael, J., Lemola, S., Butterfill, S., **Siew, C. S. Q.**, & Walasek, L. (2020). Interpersonal Functioning in Borderline Personality Disorder Traits: A Social Media Perspective. *Scientific Reports*, 10, 1068. DOI: s41598-020-58001-x
- Stella, M., De Nigris, S., Aloric, A., & **Siew, C. S. Q.** (2019). Forma mentis networks quantify crucial differences in STEM perception between students and experts. *PLOS ONE*, 14(10): e0222870. DOI: <https://doi.org/10.1371/journal.pone.0222870>
- Perko, V. L., Forbush, K. T., **Siew, C. S. Q.**, & Tregarthen, J. P. (2019). Application of network analysis to investigate sex differences in interactive systems of eating-disorder psychopathology. *International Journal of Eating Disorders*, 52(12), 1343-1352. DOI: 10.1002/eat.23170
- Wulff, D. U., De Deyne, S., Jones, M. N., Mata, R., & the Aging Lexicon Consortium* (Austerweil, J. L., Baayen, R. H., Balota, D. A., Baronchelli, A., Brysbaert, M., Cai, Q., Dennis, S., Hills, T. T., Kenett, Y. N., Keuleers, E., Marelli, M., Pakhomov, S. V., Ramscar, M., Schooler, L. J., Shing, Y., L., da Souza, A. S., **Siew, C. S. Q.**, Storms, G., Veríssimo, J.) (2019). New Perspectives on the Aging Lexicon. *Trends in Cognitive Sciences*, 23(8), 686-698. DOI: 10.1016/j.tics.2019.05.003
- Siew, C. S. Q.**, Wulff, D., & Beckage, N., & Kenett, Y. N (2019). Cognitive Network Science: A review of research on cognition through the lens of network representations, processes, and dynamics. *Complexity*, 1-24. DOI: <https://doi.org/10.1155/2019/2108423>
- McCaig, D., Elliott, M. T., **Siew, C. S. Q.**, Walasek, L., & Meyer, C. (2019). Profiling commenters on mental health-related online forums: A methodological example focusing on eating disorder-related commenters. *Journal of Medical Internet Research*, 6(4), e12555. DOI: <http://doi.org/10.2196/12555>
- Siew, C. S. Q.**, & Vitevitch, M. S. (2019). The phonographic language network: Using network science to investigate the phonological and orthographic similarity structure of language. *Journal of Experimental Psychology: General*, 1-25. Advance online publication. DOI: <https://doi.org/10.1037/xge0000575>

- Siew, C. S. Q.** (2019). spreadr: A R package to simulate spreading activation in a network. *Behavior Research Methods*, 1-20, Advance online publication. DOI: <https://doi.org/10.3758/s13428-018-1186-5>
- Li, Y., Engelthaler, T., **Siew, C. S. Q.**, & Hills, T. T. (2019). The Macroscope: A tool to examine the historical structure of language. *Behavior Research Methods*, 1-14, Advance online publication. DOI: <https://doi.org/10.3758/s13428-018-1177-6>
- Siew, C. S. Q.**, McCartney, M. J., & Vitevitch, M. S. (2019). Using network science to understand statistics anxiety among college students. *Scholarship of Teaching and Learning in Psychology*, Advance online publication. DOI: 10.1037/stl0000133
- Siew, C. S. Q.** (2018). Using network science to analyze concept maps of psychology undergraduates. *Applied Cognitive Psychology*, 1-7. DOI: 10.1002/acp.3484
- Siew, C. S. Q.** (2018). The orthographic similarity structure of English words: Insights from network science. *Applied Network Science*, 3:13.
- Siew, C. S. Q.**, Pelczarski, K., Yaruss, J. S., & Vitevitch, M. S. (2017). Using the OASES-A to illustrate how network analysis can be applied to understand the experience of stuttering. *Journal of Communication Disorders*, 65, 1-9.
- Siew, C. S. Q.** (2017). The influence of 2-hop network density on spoken word recognition. *Psychonomic Bulletin and Review*, 24(2), 496-502.
- Vitevitch, M. S., & **Siew, C. S. Q.** (2017). Three's a conversation, but four's a crowd: Estimating group size from human speech. *The Quarterly Journal of Experimental Psychology*, 70(1), 62-74.
- Forbush, K. T., **Siew, C. S. Q.**, & Vitevitch, M. S. (2016). Application of network analysis to identify interactive systems of eating disorder psychopathology. *Psychological Medicine*, 46(12), 2667-2677.
- Siew, C. S. Q.**, & Vitevitch, M. S. (2016). Spoken word recognition and serial recall of words from components in the phonological network. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 42(3), 394-410.
- Vitevitch, M. S., **Siew, C. S. Q.**, Castro, N., Goldstein, R., Gharst, J. A., Kumar, J. J., & Boos, E. B. (2015) Speech error and tip of the tongue diary for mobile devices. *Frontiers in Psychology*, 6, 1190. DOI: 10.3389/fpsyg.2015.01190
- Vitevitch, M. S., Goldstein, R., **Siew, C. S. Q.**, & Castro, N. (2014). Using complex networks to understand the mental lexicon. In Yearbook of the Poznań Linguistic Meeting 1 (pp. 119-138). DOI: 10.2478/yplm-2014-0007
- Siew, C. S. Q.** (2013). Community structure in the phonological network. *Frontiers in Psychology*, 4, 553. DOI: 10.3389/fpsyg.2013.0055

Siew, C. S. Q., Yap, M. J., & Goh, W. D. (2012). Investigating the locus of the word frequency effect in spoken word recognition. In N. Miyake, D. Peebles, & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society* (pp. 983-8). Austin, TX: Cognitive Science Society.

Publications: Non-Peer Reviewed

Siew, C. S. Q. (2022). Investigating Cognitive Network Models of Learners' Knowledge Representations. *Journal of Learning Analytics*, 9(1), 120-129.

Hills, T. T., & **Siew, C. S. Q.** (2018). Filling Gaps in Early Word Learning. *Nature Human Behavior*, 2, 662-663.

Vitevitch, M. S., **Siew, C. S. Q.**, & Castro, N. (2018). Spoken Word Recognition. In S. A. Rueschemeyer & G. Gaskell (Eds.), *The Oxford Handbook of Psycholinguistics*, 2nd Ed. (pp. 31-47). Oxford, United Kingdom.

Vitevitch, M. S., **Siew, C. S. Q.**, Pelczarski, K. M., & Yaruss, J. S. (2017). A network of stuttering. Atlas of Science. <http://atlasofscience.org/a-network-of-stuttering/>

Invited Presentations

Siew, C. S. Q. (2022, June). The Mental Lexicon As A Cognitive Network: Implications for language processing. Talk presented at *Macquarie University*, Sydney, Australia.

Siew, C. S. Q. (2022, May). Quantifying the Structure of the Mental Lexicon Using Network Science. Talk presented at the *Huazhong University of Science and Technology (HUST)-NUS Academic Lecture Series*. *Online*

Siew, C. S. Q. (2022, April). The Mental Lexicon As A Cognitive Network: Implications for language processing and acquisition. Talk presented at the *James Cook University (Singapore) Brownbag Series*, Singapore.

Siew, C. S. Q. (2021, August). Leveraging on network analysis to uncover mental lexicon structure: Applications for language research. Talk presented at the *Global Forum of Computational Social Sciences*, NUS, Singapore.

Siew, C. S. Q. (2020, December). Networks in Psychology. Invited talk presented at *Reimagine Research: Complexity Science Workshop*, Office of the Deputy President, Research and Technology (ODPRT), NUS.

Siew, C. S. Q. (2020, December). Investigating the influence of phonographic similarity structure of language networks on visual lexical decision: Insights from megastudies. Invited talk presented at *Complexity and Cognition*, Satellite symposium of the Conference on Complex Systems.

- Siew, C. S. Q.** (2020, October). Investigating processes and development of the mental lexicon through network science. Invited online lecture presented at the *Russian Academy of Sciences*, Moscow, Russia.
- Siew, C. S. Q.** (2020, July). Quantifying the structure of the mental lexicon using network science. Online talk presented at the *Virtual Psycholinguistics Forum*, CUHK, Hong Kong.
- Siew, C. S. Q.** (2020, January). Applications of Network Science to the Cognitive and Language Sciences. Talk presented at the *Complexity Community Sharing Session*. Complexity Institute, NTU, Singapore.
- Siew, C. S. Q.** (2019, September). Applications of network analysis to education research: Quantifying conceptual representations, modeling learning processes, and developing expertise. Talk presented at the *Symposium on Networks Applied in Science Education Research*. University of Helsinki, Finland.
- Siew, C. S. Q.** (2018, December). Quantifying the similarity structure of the mental lexicon using network science. Royal Holloway, University of London, Egham, UK.
- Siew, C. S. Q.** (2018, November). Using network science to understand the mental lexicon. *Developmental Psychology Seminar*. University of Oxford, Oxford, UK.
- Siew, C. S. Q.** (2018, September). Using network science to understand the mental lexicon. *Invited speaker at the Bridges Conference on Quantitative Approaches to Language Studies*. University of Warwick, Coventry, UK.
- Siew, C. S. Q.** (2018, July). The “Small World” of Psychology: Representing students’ conceptual knowledge structure of psychological science. *Invited talk presented at the Psychology Faculty Away Day*, University of Warwick, Coventry, UK.
- Siew, C. S. Q.** (2018, March). A brief introduction to network analysis. *Invited talk presented to the Warwick Engineering Psychology Group*. University of Warwick, Coventry, UK.
- Siew, C. S. Q., & Vitevitch, M. S.** (2014, June). Spoken word recognition and serial recall of words from components in the phonological network. *Invited talk given at the Language Sciences Faculty Brownbag*. Universitat Politècnica de Catalunya, Barcelona, Spain.
- Siew, C. S. Q.** (2014, June). Community structure in the phonological network. *Invited talk given at the Language Sciences Faculty Brownbag*. Universitat Politècnica de Catalunya, Barcelona, Spain.

Contributed Presentations

- Siew, C. S. Q., Castro, N., & Chern, J.** (2022, November). Higher L2 Proficiency is Associated with Greater Sensitivity to Distant Connections and Community

Structure in the Phonological Lexicon. Talk to be presented at the *63rd Annual Meeting of the Psychonomic Society*, Boston, USA.

Siew, C. S. Q., & Castro, N. (2021, October). Long distance connections in the phonological network. Talk presented at *CompCog: A satellite symposium of the Conference on Complex Systems 2021*. Online.

Siew, C. S. Q., & Vitevitch, M. S. (2021). An investigation of network growth principles in the phonological language network. Talk presented at the *15th Congress of the International Association for the Study of Child Language*. Philadelphia, PA, USA. Online

Siew, C. S. Q. (2019, November). Feature Distinctiveness Effects in Language Acquisition and Lexical Processing: Insights from Megastudies. Talk presented at the *60th Annual Meeting of the Psychonomic Society*. Montreal, Canada.

Siew, C. S. Q. (2019, October). Bigram Humor is Associated with Lower Activation Entropy in a Semantic Network. Talk presented at the *2019 Conference on Complex Systems*. NTU, Singapore.

Castro, N., Stella, M., & **Siew, C. S. Q.** (2019, October). Quantifying the interplay of semantics and phonology during failures of word retrieval by people with aphasia using a multiplex lexical network. Talk presented at the *2019 Conference on Complex Systems*. NTU, Singapore.

Siew, C. S. Q. (2019, May). Quantifying the structure of the mental lexicon using network science. *2nd Warwick Postdoctoral Science Symposium*, University of Warwick, Coventry, UK.

Siew, C. S. Q. (2019, March). Using network science to understand the mental lexicon. *International Convention of Psychological Science*, Paris, France.

Siew, C. S. Q. (2018, September). Spreading activation in a language network. *Language and Learning Away Day*. University of Warwick, Coventry, UK.

Siew, C. S. Q. (2018, June). Investigating the influence of similarity structure of language networks on visual word recognition: Insights from megastudies. *Cognitive Network Science 2018*. Paris, France.

Siew, C. S. Q., & Hills, T. T. (2018, June). The “Small World” of Psychology: How do novices and experts represent their conceptual knowledge structure of psychological science? *NetSciEd 2018*. Paris, France.

Siew, C. S. Q. (2018, May). The influence of closeness centrality on visual word recognition. *International Meeting of the Psychonomic Society*. Amsterdam, Netherlands.

- Siew, C. S. Q.** (2018, April). The Small World of Psychology: Exploring the knowledge structure of psychology undergraduates. *Data Natives*. City University, London.
- Siew, C. S. Q.** (2017, October). Language and Network Science. *Language and Learning Seminar*. University of Warwick, Coventry, UK.
- Siew, C. S. Q.** (2017, June). The phonographic network of language. *Cognitive Network Science 2017*. Indianapolis, IN.
- Siew, C. S. Q.** (2016, November). Using network science to study the organization of knowledge. *Red Hot Research at The Commons*. University of Kansas, Lawrence, KS.
- Siew, C. S. Q., & Vitevitch, M. S.** (2015, September). The influence of network density on spoken word recognition. *Cognitive and Brain Sciences Proseminar: Graduate Student Data Blitz*. University of Kansas, Lawrence, KS.
- Siew, C. S. Q., & Vitevitch, M. S.** (2015, April). Spoken word recognition and serial recall of words from components in the phonological network. *Child Language Proseminar*. University of Kansas, Lawrence, KS.
- Siew, C. S. Q., & Vitevitch, M. S.** (2014, March). Learning new words: Preferential attachment or preferential acquisition? *Graduate Student Research Competition*. University of Kansas, Lawrence, KS.
- *Placed 3rd in the Early Graduate Students Category*
- Siew, C. S. Q.** (2013, November). Community structure in the phonological network. *Cognitive Psychology Proseminar*. University of Kansas, Lawrence, KS.
- Siew, C. S. Q., & Vitevitch, M. S.** (2013, March). Using human vocalizations to estimate group size. *Graduate Student Research Competition*. University of Kansas, Lawrence, KS.
- Siew, C. S. Q., Yap, M. J., & Goh, W. D.** (2012, August). Investigating the locus of the word frequency effect in spoken word recognition. *Paper presented at the 34th Meeting of the Cognitive Science Society*. Sapporo, Japan.

Poster Presentations

- Siew, C. S. Q., & Tan, J. F.** (2022, September). Production and perception errors from a speech error corpus reflect the macro- and meso-level structure of the phonological language network. Poster to be presented at *Architectures and Mechanisms for Language Processing (AMLaP) 28*. York, United Kingdom. Online.
- Siew, C. S. Q., & Castro, N.** (2021, November). Phonological Relatedness Judgments Reflect the Existence of (Somewhat) Distant Connections and Community Structure in the Phonological Lexicon. Poster presented at the *62nd Annual Meeting of the Psychonomic Society*, New Orleans, USA. Online

- Siew, C. S. Q.** (2021). Investigating the effect of distance entropy on semantic priming. Poster presented at the *43rd Annual Meeting of the Cognitive Science Society*, Vienna, Austria. Online
- Siew, C. S. Q., & Guru, A.** (2021). Longitudinal Subject Fluency Networks of Psychology and Biology Students. Poster presented at the *4th Northeast Regional Conference on Complex Systems*, Binghamton University, USA. Online
- Siew, C. S. Q., Chan, K. Y., & Castro, N.** (2020, December). Exploring the Phonological Spaces of the English Lexicon of L1 and L2 Speakers: Insights from Network Analysis. *Poster presented at the 61st Annual Meeting of the Psychonomic Society (Online)*.
- Siew, C. S. Q., Horvath, K., Plunkett, K., & Chow, J.** (2020). Sleep and Naps Facilitate Semantic Network Growth. Poster to be presented at the ICIS Biennial Congress. Glasgow, Scotland. *Conference postponed to 2021*.
- Li, Y., & **Siew, C. S. Q.** (2019, November). Diachronic semantic change predicts semantic processing and language acquisition. *Poster presented at the Annual Meeting of the Society for Computers in Psychology*, Montreal, Canada.
- Siew, C. S. Q., Engelthaler, T., & Hills, T. T.** (2019, March). Humorous Phrases Generator: A Citizen Science Project to Provide Insights into the Mechanisms of Humor. *Poster presented at International Convention of Psychological Science*, Paris, France.
- Siew, C. S. Q.** (2018, November). Investigating the influence of orthographic and phonological similarity structure of language networks on visual word recognition: Insights from megastudies. *Poster presented at the 59th Annual Meeting of the Psychonomic Society*. New Orleans, Louisiana.
- *Recipient of the 2018 Psychonomic Society and Women in Cognitive Science Travel and Networking Award*
- Siew, C. S. Q.** (2018, September). Investigating the influence of similarity structure of language networks on visual word recognition: Insights from megastudies. *Poster presented at AMLaP*. Berlin, Germany.
- Siew, C. S. Q.** (2018, June). Simulating the accumulation of partial activation in the phonological language network. *Poster presented at NetSci 2018*. Paris, France.
- Siew, C. S. Q.** (2017, November). Using network science to study the orthographic language network of English. *Poster presented at the 6th International Conference on Complex Networks and Their Applications*. Lyon, France.
- Siew, C. S. Q., & Vitevitch, M. S.** (2017, November). The phonographic network of language: Using network science to investigate the phonological and orthographic similarity structure of language. *Poster presented at the 58th Annual Meeting of the Psychonomic Society*. Vancouver, Canada.

- Chan, K. Y., & **Siew, C. S. Q.** (2017, November). Dynamics of lexical competition during foreign-accented word recognition. *Poster presented at the 58th Annual Meeting of the Psychonomic Society*. Vancouver, Canada.
- Covey, L., Girolamo, T., **Siew, C. S. Q.**, Weyers, I., Yang, X., Vogt-Woodin, A., Coughlin, C., & Minai, U. (2017, November). Examining the role of pragmatics during children's comprehension of *only*: An eye-tracking study. *Poster presented at the 42nd Boston University Conference on Language Development*. Boston, MA.
- Siew, C. S. Q.**, & Vitevitch, M. S. (2016, November). The influence of orthographic clustering coefficient in visual word recognition. *Poster presented at the 57th Annual Meeting of the Psychonomic Society*. Boston, MA.
- Castro, N., **Siew, C. S. Q.**, & McCartney, M. J. (2016, November). H.M. in the flesh or as a cartoon: The influence of video type on learning and test performance. *Poster presented at the 57th Annual Meeting of the Psychonomic Society*. Boston, MA.
- Siew, C. S. Q.** (2016, May). The brain drakes sometimes: An analysis of crowdsourced speech errors. *Poster presented at the 28th APS Annual Conference*. Chicago, IL.
- Siew, C. S. Q.**, & McCartney, M. J. (2016, May). Predictors of performance in general psychology. *Poster presented at the 28th APS Annual Conference, Teaching Institute*. Chicago, IL.
- Siew, C. S. Q.** (2016, May). Strategies for classroom discussion: Examples from PSYC 104. *Poster presented at C21 (21st Century Course Redesign Consortium)*. University of Kansas.
- Siew, C. S. Q.**, & Vitevitch, M. S. (2015, November). The influence of network density on spoken word recognition. *Poster presented at the 56th Annual Meeting of the Psychonomic Society*. Chicago, IL.
- *Recipient of the 2015 Psychonomic Society Graduate Travel Award*
- Covey, L., Coughlin, C., Martinez-Garcia, M., Johnson, A., Yang, X., **Siew, C. S. Q.**, Major, T., Fiorentino, R. (2015, October). An ERP investigation of the role of prediction and individual differences in semantic priming. *Poster presented at the 7th Annual Meeting of the Society for the Neurobiology of Language*. Chicago, IL.

Awards & Honors

- Promising Researcher Award, FASS, NUS (2021)
- Recipient of the Young Researchers of the Complex Systems Society (yrCSS) Bridge Grant (2020)
- Psychonomic Society and Women in Cognitive Science Networking and Travel Award (2018)
- Overseas Postdoctoral Fellowship, National University of Singapore (2017-2019)
- Psychological Science Improvement Grant, University of Kansas (2017)
- Society of Young Network Scientists Scholarship Award (2017)

- Departmental nominee for Graduate Teaching Assistant Award (2017)
- University of Kansas Graduate Student Conference Travel Award (2016)
- Young Scientist Travel Award, Cognitive Science Program, Indiana University (2016)
- Psychonomic Society Graduate Student Travel Award (2015)
- Montie McMickle Award, University of Kansas (2015)
- NetWordS (The European Network on Word Structure) Short Visit Travel Award, European Science Foundation (NetWordS 09-RNP-089; 2014)
- Graduate Research Consultant Award, University of Kansas (2014, 2013)
- 3rd place, Graduate Student Research Competition (Early Graduate Students Category), University of Kansas (2014)
- George Kellas Scholarship in Cognitive Psychology, University of Kansas (2012)
- Dean's List, National University of Singapore (2008)
- Faculty Award, National University of Singapore (2007-2011)

Grants

DSO National Laboratories - Principal Investigator

- *The Small World of Singlish Words: Mapping the Associative Structure of the Singaporean Mental Lexicon*
- Award amount: SGD \$ 274,578.96

Ministry of Education Academic Research Fund Tier 1 (2019-present) - Principal Investigator

- *The influence of phonological, orthographic, and semantic similarity structure of memory on language processing and cognition*
- Award amount: SGD \$ 180,000

City University of Hong Kong Strategic Research Grant (2020-2021) - Co-Investigator

- *The Effect of Phonological Local Network Structure on Second Language Word Learning* (PI: Dr. Vivien Kit Ying Chan, City University of Hong Kong; Co-I: Dr. Nichol Castro, University of Washington)
- Award amount: HKD 100,000

Ministry of Education Academic Research Fund Tier 1 (2020-2021) - Co-Investigator

- *Global trends of language endangerment* (PI: Dr. Nala Huiying Lee, National University of Singapore)
- Award amount: SGD \$ 65,489

Hong Kong Research Council General Research Fund (submitted in 2019, not funded) - Co-Investigator

- *Similar-sounding relations among words and word learning in adult second language learners* (PI: Dr. Vivien Kit Ying Chan, City University of Hong Kong; Co-I: Dr. Nichol Castro, University of Washington)

Hong Kong Research Council General Research Fund (submitted in 2018, not funded) - Co-Investigator

- *Studying the phonological lexicon and word learning in adult second language learners through network analysis* (PI: Dr. Vivien Kit Ying Chan, City University of Hong Kong; Co-I: Dr. Nichol Castro, University of Washington)

City University of Hong Kong Start-Up Grant (2018-present) – Co-Investigator

- *Examining the structure of phonological networks in second language learners* (PI: Dr. Vivien Kit Ying Chan, City University of Hong Kong; Co-I: Dr. Nichol Castro, University of Washington)
- Award amount: HKD 200,000

Warwick-Monash Accelerator Fund (2018-2019) – Consultant for Network Analysis

- *Social networks among people with Borderline Personality Disorder* (PI: Dr. John Michael; University of Warwick)
- Award amount: AUD 250,000 + GBP 125,000

Teaching Experience

Courses taught (National University of Singapore; 2020-present):

- PL3237 Language and Cognitive Processes
 - AY2019/2020 Semester 2; AY2020/2021 Semester 1
- PL3281E Lab in Speech and Language Processes
 - AY2020/2021 Semester 2; AY2022/2023 Semester 1
- PL4246 Networks in Psychology
 - AY 2021/2022 Semester 1; AY2022/2023 Semester 1

Courses taught (University of Kansas; 2015-2017):

- PSYC 104 General Psychology
 - Fall 2015; 4 sections; total enrollment = 176 students
 - Spring 2016; 4 sections; total enrollment = 133 students
 - Fall 2016; 4 sections; total enrollment = 176 students
 - Spring 2017; 4 sections; total enrollment = 164 students
- PSYC 318 Cognitive Psychology (Online)
 - Summer 2016; total enrollment = 59 students

Teaching Assistant (University of Kansas 2012-2015):

- PSYC 430 Cognitive Development (Spring 2015)
- PSYC 625 Methods in Neuropsychology and Psychophysiology (Fall 2014, Fall 2013)
- PSYC 375 Cognitive Neuroscience (Spring 2014)
- PSYC 105 General Psychology (Spring 2013)
- PSYC 333 Child Development (Fall 2012)

Service: Journals & Reviewing

Associate Editor:

- Behavior Research Methods (2022-present)

Guest-Editor:

- Special Issue in *Complexity*. Cognitive Network Science: A New Frontier (2017-2019)

Editorial Board/Review Board:

- Behavior Research Methods (2020-2022)
- Journal of Cognition (2019-present)
- Frontiers in Language Sciences (2022-present)

Ad-hoc Reviewer:

Adaptive Behavior, Applied Network Science, Applied Psycholinguistics, Behavior Research Methods, Brain Sciences, Cognitive Science, Cognitive Processing, Cognition, Developmental Psychology, First Language, Frontiers in Psychology, International Journal of Early Years Education, International Journal of Speech-Language Pathology, Journal of Cognition, Journal of Complex Networks, Journal of Experimental Psychology: Learning, Memory, and Cognition, Journal of Experimental Psychology: General, Journal of Memory and Language, Journal of Psycholinguistic Research, Journal of Neurolinguistics, Language Learning and Development, Mental Lexicon, PLOS ONE, Psychological Methods, Poznan Studies in Contemporary Linguistics, Scholarship of Teaching and Learning in Psychology, Synthese, Visual Cognition.

Conference Reviewer:

CogSci2022 (4 reviews)
AMLaP 2022 (7 reviews)

External Reviewer for Research Grants:

Hong Kong General Research Fund (2022; 2 reviews)

Service: Mentorship & Examiner

Thesis Committee Member/External Examiner, NUS

2022:

- o Wong Chin Yi (PhD, Department of Psychology) *Title: Individual differences in spoken word recognition: The role of proficiency in phonological similarity effects*

2021:

- o Chee Qian Wen (Masters, Department of Psychology) *Title: What predicts English Spelling-To-Dictation Performance?*
- o Cleo Tay (Masters, Department of Psychology) *Title: Parental Mental State Talk in Two Contexts: Parents' Cognitive Sentential Complements are Positively Associated with Children's Theory of Mind*
- o Pamela Koh Yong Zhen (Masters, Department of Speech & Language Pathology) *Title: Literacy in Children with Lupus and Offspring of Lupus Mothers: A Systematized Review*
- o Tan Yi Xian (Masters, Department of Speech & Language Pathology) *Title: English Core Lexicon for English-Mandarin Bilingual Adults in Singapore*

2020:

- o Choo Ai Kheng Magdalene Selina (PhD, Department of Psychology) *Title: Of thread and mum: Familiarity and recollective mechanisms in the processing of ambiguous words*
- o Ramachandran Shruthilaya (Masters, Department of Psychology) *Title: Social preferences in Singapore preschoolers: Social, cognitive, socio-cognitive and linguistic factors of influence*
- o Reiner Ng Wei Jie (Masters, Department of Psychology) *Title: When objective ambivalence leads to subjective ambivalence for health behaviors: An affect-cognition matching perspective*

Thesis Supervisor, Department of Psychology, NUS

AY2022/2023:

- o Timothy Yee (Honors Thesis)

AY 2021/2022:

- o Frederick Lau (Honors Thesis)
- o Grace Wong (Honors Thesis)
- o Emil Kuah (Honors Thesis)
- o Ng Shi Xian (Honors Thesis)
- o Nicole Kuek (Clinical Masters Thesis)

AY 2020/2021:

- o Jazton Chern (Honors Thesis)
- o Wong Jin Jye (Honors Thesis)
- o Mary Lim (Clinical Masters Thesis)

Undergraduate Research Supervisor, Department of Psychology, NUS

- o 2022: Timothy Yee
- o 2021: Arjun Muthukumar, Zeng Ying, Shanmugavel Swetha
- o 2020: Zoe Chin

Service: Other

- Organizing Committee Member, Virtual Psycholinguistics Forum Talk Series (2021-present)
- Program Committee Member for the Workshop on Cognitive Aspects of the Lexicon (CogALex; 2022)
- Scientific Committee Member, Complexity and Cognition Satellite at the Conference on Complex Systems (2020-present)
- Ethics Review Board, Department of Psychology, National University of Singapore (2020-2022)
- Graduate Committee, Department of Psychology, National University of Singapore (2019-2020; 2022-present)
- Invited panelist at the Young Researchers of the Complex Systems Society Panel Discussion at the Conference on Complex Systems (2019)
- Women in Cognitive Science Travel and Networking Award Committee (2019)
- Program Committee for *Complex Networks 2018*, Cambridge, UK (2018)
- Conference organizing committee for *Networks in Cognitive Science*, NetSci 2018 Satellite Conference, Paris, France (2018)

- Ethics Review Board, Department of Psychology, University of Warwick (2017-2018)

Professional Development

- Professional Development Program-Teaching, CDTL, NUS (7th-10th Jan 2020)
- Winter Workshop in Complex Systems 2019, Zakopane, Poland (4th-8th February 2019) (selected participant)
- Statistical Methods in Linguistics and Psychology Summer School 2018, Potsdam, Germany (10th-14th September 2018) (selected participant)
- Symposium on The Aging Lexicon, Basel, Switzerland (7th-9th June 2018) (invited attendee)
- Winter Workshop in Complex Systems 2018, Utrecht, Netherlands (29th January-2nd February 2018) (selected participant)

Software Skills

- Programming languages: R, Python, C++_
- Statistical packages: R, SPSS, SAS
- Network / graph analysis: R, Gephi
- Experimental software: E-prime, Psyscope, Paradigm, Mousetracker
- Creator and maintainer of *spreadr* R package published on CRAN R Project (v0.1.0, November 2018)
 - R package for conducting computer simulations of spreading activation in a network
 - <https://cran.r-project.org/web/packages/spreadr/index.html>

Science Communication and Outreach

- Invited panelist for University of Exeter's Data Science Week (July 2022): "Novel perspectives for data science in psychology"
- Media coverage of research in [Channel News Asia](#) and [The HomeGroundAsia](#)

Professional Affiliations

- Psychonomic Society; Member (2017-2022); Fellow (2022-present)
- Cognitive Science Society; Member (2017-present)
- Association for Psychological Science; Member (2017-present)

Last updated: 19th August 2022