Fan Cao, Ph.D.

Department of Psychology
the University of Hong Kong
The Jockey Club Tower, Room 6.06

Email: fancao@hku.hk
Phone: (852)-39172239

Google scholar H-index: 27, citation: 3344; FWCI (Field weighted citation impact): 1.3

Education

2004-2009	PhD, Communication Sciences and Disorders, Northwestern University, Evanston, IL. USA
2001-2004	MA, Psychology, Beijing Normal University, Beijing, China
1997-2001	BS, Psychology, Beijing Normal University, Beijing, China

Positions

2022-present	Associate Professor, Department of Psychology, the University of Hong Kong
2017-2022	Professor, Department of Psychology, Sun Yat-Sen University, Guangzhou, Guangdong, China
2014-2018	Assistant Professor, Department of Communicative Sciences and Disorders, Michigan State University, East Lansing, MI. USA
2011-2013	Assistant Professor, elite Nanyang Assistant Professor, Division of Psychology, School of Humanities and Social Sciences, Nanyang Technological University, Singapore
2009-2011	Post-doctoral fellow, Learning Research and Development Center, University of Pittsburgh, USA

Grants

External grants

2027-2030	PI, National Natural Science Foundation of China (82672003) (CNY ￥ 490,000), *Neural mechanisms of visual deficits in individuals with developmental dyslexia*.
2026-2029	PI, General Research Fund, awarded by the Research Grants Council, Hong Kong (17608726) (HKD$ 740,382), *Neural entrainment to visual stimuli in individuals with developmental dyslexia.*
2026-2029	PI, Health and Medical Research Fund (HMRF), Hong Kong (23243471) (HKD$ 1,499,688), *Response trajectories to reading intervention in Chinese children and adults with developmental dyslexia: a randomized controlled trial.*
2025-2028	PI, General Research Fund, awarded by the Research Grants Council, Hong Kong (17605925) (HKD$ 1,198,578), *Neural plasticity during different reading interventions in Chinese children with reading disability.*
2022-2025	PI, National Social Science Fund of China (21BYY204) (CNY ￥ 200,000), *Neural correlates of subtypes of reading disability and their developmental changes.*

2020-2023 PI for a sub-contract, awarded by Science and Technology Program of Guangzhou, China, Key Area Research and Development Program (202007030011) (CNY￥1,500,000), *Brain mechanisms of developmental neurological disorders.*

2019-2021 PI, awarded by Guangdong Province Planning Office of Philosophy and Social Science (GD19CXL05) (CNY￥50,000*), Second language learning and critical period.*

2013-2017 PI, awarded by the Ministry of Education, Singapore (SGD$438,461), Academic Research Fund Tier 2, *Brain changes following different interventions in bilingual children with reading disability.*

Internal grants

2025 Seed grant awarded by the Faculty of Social Sciences, University of Hong Kong

2023 Seed grant awarded by the University of Hong Kong

2023 Postdoc funding awarded by the University of Hong Kong

2019-2021 PI, awarded by Sun Yat-Sen University, Advanced Support for Innovative Research Excellence (19wkjc08) (CNY￥200,000), *Brain mechanisms underlying foreign speech imitation.*

2018-2019 PI, awarded by Sun Yat-Sen University, Seed grant (18wkzd13) (CNY ￥150,000), *Neural correlates of language learning and disability.*

2010-2012 PI, Open project grant awarded by the State Key Lab of Cognitive Neuroscience and Learning, Beijing Normal University (CNY$100,000), *Neural networks of reading in bilingual adults: proficiency effect*

Awards

2021 Awardee, Yat-Sen Scholar, Sun Yat-Sen University

2018 Awardee, Peacock talent program, Shenzhen Government

2017 Awardee, Hundred Top Talents Program, Sun Yat-Sen University

2011 Awardee, Elite Nanyang Assistant Professorship, Nanyang Technological University, Singapore. 10 awardees across disciplines in the university every year

Research Interests

Developmental cognitive neuroscience
Neural basis of developmental disorders such as ASD, ADHD and developmental dyslexia
Brain changes following interventions in individuals with developmental disorders
Neural basis of second language learning in children and adults

Editorial Membership

2027- 2032 Incoming Associate Editor, *Annals of Dyslexia*

2026- present Editorial Board Member, Guest Editor, *Communications Psychology*

2024- present Academic Editor, *PLOS One*

2022- present Editorial Board Member, *Brain Sciences*

2018- 2024 Associate Editor, *Frontiers in Psychology*

Peer-Reviewed Journal Articles **(* indicates the first author is/was a student or post-doc in my lab; corresponding authors are underscored.)**

1. Li X*, Zuo F, Cheng Y, Perkins K, **Cao F**. (2026). Two clusters of brain regions with distinct sage-related profiles of functional connectivity in Autism Spectrum Disorders. ***Proc. Natl. Acad. Sci. U.S.A.*** 123 (42) e2617358123, https://doi.org/10.1073/pnas.2617358123.
2. Yuan Y*, Zhang B, Perkins K, **Cao F.** (2026). Non-linear shift along the sensorimotor-associative axis in brain responses to task performance. **NeuroImage.** 334:121978.
3. **Cao F,** Wu Y, Feng G. (2026). Intervention-induced cortical thickness changes in children with reading disability. **Brain and Language**. 276, 105747.
4. Yan X*, Xu S, Feng G, **Cao F.** (2026). Abnormal developmental trajectories in the brain in individuals with reading disability. **Developmental Science**. 29(1): e70113.
5. Yan X*, Mao J, Ma Z, Perkins K, Li W, Wang Y, **Cao F**. (2025). Neural correlates of foreign speech imitation: the effect of age and music. **Imaging Neuroscience**. doi: https://doi.org/10.1162/IMAG.a.75
6. Feng G*, Shen L, Shi L, Yan X, Liang Y, Zhang L, Zuo S, Wu Y, **Cao F.** (2025). Brain changes following two reading interventions in Chinese children with reading disability. **Developmental Science**. 28(4): e70038. doi: 10.1111/desc.70038.
7. Xu S*, Wang X, Shen L, Yan X, Feng G, **Cao F**. (2025). Brain functional differences during irony comprehension in adolescents with ASD. **Cerebral Cortex.**35(2) bhaf003, https://doi.org/10.1093/cercor/bhaf003
8. Shen L*, Feng G, Shi L, Wu Y, **Cao F**. (2025). The effectiveness of phonological training and morphological training in Chinese children with reading difficulty. **Reading and writing**. 38, 2979-3008.
9. Fu Y*， Yan X, Mao J, Su H, **Cao F**. (2024). Abnormal brain activation during speech perception and production in children and adults with reading difficulty. **npj Science of Learning***.* 9, 53.
10. Yan, X.*, Fu, Y., Feng, G., Li, H., Su, H., Liu, X., Wu, Y., Hua, J., & **Cao, F**. (2024). Reading disability is characterized by reduced print–speech convergence. **Child Development**, 00, 1–18.
11. Yan, X. *, Feng, G., Fu, Y., Hua, J., & **Cao, F**. (2024). Age-related changes in individuals with and without reading disability: Behavioral and fMRI evidence. **Imaging Neuroscience***, 2*, 1-18.
12. Wang A*, Yan X, Feng G, **Cao F**. (2024) Shared and task-specific brain functional differences across multiple tasks in children with developmental dyslexia. **Neuropsychologia**, 201:108935.
13. **Cao F** (2023). Brain changes with Chinese reading development in typical and atypical readers. **Frontiers in Psychology***.* 14:1292985.
14. Feng G*, Yan X, Shen L, Perkins K, Mao J, Wu Y, Shi L, **Cao F.** (2023). Distinct neural correlates of poor decoding and poor comprehension in children with

reading disability. **Cerebral Cortex**. 33, 3239-3254. doi: 0.1093/cercor/bhac272.

15. Wu Y*, Feng G, Yan X, Perkins K, Liu L, Yan X, **Cao F.** (2022). Reduced pattern similarity in brain activation during orthographic processing in children with developmental dyslexia. **Brain and Language**. 235, 105201.
16. **Cao F**, Fan Y, Yan X, Chen W, Dodson-Garrett M, Spray, GJ, Wang Z, Deng Y. (2022). Greater similarity between L1 and L2's brain network in adults than in children. **Frontiers in Neuroscience**. 16: 816729.
17. Kim S* & **Cao F.** (2022). How does the brain read different scripts? Evidence from English, Korean, and Chinese. **Reading and writing**. 35, 1449–1473.
18. Yan X*, Jiang K, Li H, Wang Z, Perkins K, & **Cao F.** (2021). Convergent and divergent structural and functional brain abnormalities associated with developmental dyslexia. **eLife.** https://doi.org/10.7554/eLife.69523
19. Mao J*, Liu L, Perkins K, **Cao F.** (2021). Poor reading is characterized by a more connected network with wrong hubs. **Brain and Language***. 220*
20. Yan X*, Perkins K, **Cao F**. (2021) A hierarchical deficit model of developmental dyslexia: evidence from a DCM study. **Neuropsychologia***. 154.* doi: 10.1016/j.neuropsychologia.2021.107777
21. **Cao F,** Yan X, Yan X, Zhou H, Booth JR. (2021) Reading disability in Chinese children learning English as an L2. **Child Development.** 92(2): e126-e142.
22. Kim S*, Liu L, Liu L, **Cao F.** (2020). Neural representational similarity between L1 and L2 in spoken and written language processing. **Human Brain Mapping**. 41(17):4935-4951. doi: 10.1002/hbm.25171.
23. **Cao F,** Wang Z, Yan X, Sussman B, Spray G, Rios V. (2019) L1 reading experience influences L2 lexical learning: Spanish learning in Chinese speakers and English speakers. **Neuroscience***.* 416: 255-267.
24. Wang Z*, Yan X, Liu Y, Spray G. J., Deng Y, **Cao F.** (2019). Structural and functional abnormality of the putamen in children with developmental dyslexia. **Neuropsychologia***.* 130:26-37.
25. Wang C, Yang Z, **Cao F**, Liu L, Tao S. (2019) Letter-sound integration in native Chinese speakers learning English: Brain fails in automatic responses but succeeds with more attention. **Cognitive Neuroscience.** 10(2):100-116.
26. **Cao F,** Yan X*, Spray G. J., Liu Y， Deng Y. (2018). Brain mechanisms underlying visuo-orthographic deficits in children with developmental dyslexia. **Frontiers in Human Neuroscience***.* 12: 490.
27. Kim S* Liu L & **Cao F.** (2017). How does first language (L1) influence second language (L2) reading in the brain? Evidence from Korean-English and Chinese-English bilinguals. **Brain and Language***.* 171:1-13.
28. **Cao F,** Sussman B, Rios V, Yan X, Spray G, Wang Z, Mack R. (2017). Different brain mechanisms involved in learning different L2s: evidence from native English speakers learning Spanish and Chinese. **NeuroImage,** 148: 284-295*.*
29. **Cao F**, Yan X, Wang Z, Liu Y, Wang J, Spray G, Deng Y. (2017). Neural signatures of phonological deficits in developmental dyslexia. **NeuroImage,** 146, 301-311.
30. Lagarrigue A, Longcamp M, Anton J, Nazarian B, Prevot L, Velay J, **Cao F**, Frenck-Mestre C. (2017). The neural network of reading: Does writing help the brain accommodate for linguistic diversity? **Neuropsychologia***,* 97, 83-97.
31. **Cao F.** (2017). Brain MRI data in Chinese dyslexic children performing an

auditory rhyming judgment task. *Data in Brief*, 11:473-478.

32. **Cao F** & Perfetti CA. (2016). Neural signatures of the reading-writing connection: greater involvement of writing in Chinese reading than English reading. **Plos One***.* 11(12): e0168414.
33. Liu H* & **Cao F.** (2016). L1 and L2 processing in the bilingual brain: a meta-analysis on neuroimaging studies. **Brain and Language***,* 159, 60-73.
34. **Cao F.** (2016). fMRI data from Korean, Chinese and English subjects in a word rhyming judgment task. *Data in Brief*, 7, 591-594.
35. Kim S*, Qi T, Fang X, Ding G, Liu L, & **Cao F.** (2016). How does language distance between L1 and L2 affect the L2 brain network? An fMRI study of Korean-Chinese-English trilinguals. **NeuroImage**, 129, 25-39.
36. **Cao F.** (invited review article) (2016). Neuroimaging studies on bilingual reading. **Bilingualism: Language and Cognition***.* 19(4), 683-688.
37. **Cao F**, Brennan C & Booth JR. (2015). The brain adapts to orthography with experience: Evidence from English and Chinese. **Developmental Science,** 18(5): 785-798.
38. **Cao F**, Kim S, Liu Y & Liu L. (2014). Similarities and differences in brain activation and functional connectivity in first and second language reading: Evidence from Chinese learners of English. **Neuropsychologia,** 63, 275-284*.*
39. **Cao F**, Tao R, Liu L, Perfetti CA, & Booth JR. (2013). High proficiency of second language is characterized by greater involvement of the first language network: evidence from Chinese learners of English. **Journal of Cognitive Neuroscience***,* 25(10), 1649-1663.
40. **Cao F,** Rickles B, Vu M, Zhu Z, Chan H, Harris L, Stafura J & Perfetti CA. (2013). Early-stage visual processing predicts retention in second language learning: an ERP study. **Journal of Neurolinguistics***,* 26(4), 440-461*.*
41. Perfetti CA, **Cao F,** Booth JR. (2013). Specialization and universals in the development of reading skill: How Chinese research informs a universal science of reading. **Scientific Studies of Reading,** 17(1), 5-21*.*
42. Brennan C, **Cao F,** Pedroarena-Leal N, McNorgan C & Booth JR. (2013). Learning to read reorganizes the oral language network only in alphabetic writing systems. **Human Brain Mapping***,* 34(12), 3354-3368.
43. **Cao F,** Vu M, Chan H, Lawrence J, Harris L, Guan Q, Xu Y & Perfetti CA. (2013). Writing affects the brain network of reading in Chinese: an fMRI study. **Human Brain Mapping***,* 34(7), 1670-1684.
44. **Cao F**, Khalid K, Lee R, Brennan C, Yang Y, Li K, Bolger DJ, & Booth JR. (2011). Development of brain networks involved in spoken word processing of Mandarin Chinese. **NeuroImage,** 57(3), 750-759.
45. **Cao F**, Lee R, Shu H, Yang Y, Xu G, Li K & Booth JR. (2010) Cultural constraints on brain development - Evidence from a developmental study of Chinese visual words processing. **Cerebral Cortex,** 20(5), 1223-1233.
46. **Cao F**, Khalid K, Zaveri R, Bolger DJ, Bitan T & Booth JR. (2010) Neural correlates of priming effects in children during spoken words processing with orthographic demands. **Brain and Language***,* 114(2), 80-89.
47. Liu L, Deng X, Peng D, **Cao F**, Ding G, Jin Z, Zeng Y, Li K, Zhu L, Fan N, Deng Y & Booth JR. (2009) Modality- and task-specific brain regions involved in Chinese lexical processing. **Journal of Cognitive Neuroscience***,* 21, 1473-1487*.*

48. **Cao F,** Peng DL, Liu L, Jin Z, Fan N, Deng Y, & Booth JR. (2009). Developmental differences of neurocognitive networks of phonological and semantic processing in Chinese word reading. **Human Brain Mapping***,* 30(3), 797-809*.*
49. **Cao F**, Bitan T & Booth JR. (2008). Effective connectivity in children with reading difficulties during phonological processing. **Brain and Language***,* 107, 91-101.
50. **Cao F**, Bitan T, Chou TL, Burman DD & Booth JR. (2006). Deficient orthographic and phonological representations in developmental dyslexics revealed by brain activation patterns. **Journal of Child Psychology and Psychiatry**, 47(10), 1041-1050.
51. Bitan T, Burman DD, Chou TL, Dong L, Cone NE, **Cao F**, Bigio JD & Booth JR. (2007) The interaction between orthographic and phonological information in children: an fMRI study. **Human Brain Mapping***,* 28(9), 880-891.
52. Chou TL, Booth JR, Bitan T, Burman DD, Bigio JD, Cone NE, Dong L & **Cao F.** (2006). Developmental and skill effects on the neural correlates of semantic processing to visually presented words. **Human Brain Mapping**, 27, 915-924.
53. Shu H, Meng X, Chen X, Luan H, & **Cao F**. (2005). The subtypes of developmental dyslexia in Chinese: Evidence from three cases. **Dyslexia**, 11, 311-329.

Book chapters

Cao F (2026). Neuroimaging research of Chinese reading disability. In Sihui Ke, Sun-A Kim, Yu-Yin Hsu (Ed.), *Handbook of Research on Reading Chinese as a Global Language.* Springer Nature Singapore Pte Ltd.

Cao F (2025). Brain changes in Chinese reading development and disorders. In: Winskel, H., Pae, H.K. (eds) Handbook of Nonlinear Writing Systems. Springer, Cham. https://doi.org/10.1007/978-3-032-01973-8_10 ISBN: 978-3-032-01972-1

Cao F (2018). Neural correlates of Chinese word reading. In H. K. Pae (Ed.), *Writing systems, reading processes, and cross-linguistic influences: Reflections from the Chinese, Japanese and Korean languages.* Amsterdam/Philadelphia: John Benjamins

Manuscripts

1. **Cao F,** Fu Y, Wang A, Perkins K. (under review). Age differences in foreign speech learning: an inter-brain synchrony approach.
2. Fu Y *, Zhou H, Zhu H, Wang Z, Wang F, Zhou Y, Deng H, **Cao F**. (under review). Children with ASD benefit from mindful parenting training in parents.
3. Wang X*, Liao Y, Xu S, Perkins K, Fu Y, Wang S, **Cao F**. (under review). Brain changes following joint attention intervention in young children with ASD.

Invited Keynote Speech and Conference Oral Presentations

Cao F. Neural changes in typical and atypical reading development. International Symposium on Language Science: Interdisciplinary Research and the Legacy of Yuen Ren Chao, *May 2026, The Hong Kong Polytechnic University, Hong Kong.*

Cao F. Brain changes with reading development and disorders. 中国心理学会语言专委会，大会报告，2024年11月，北京

Cao F. Neural plasticity during Chinese reading development and disorders. 第十三届华人心理学家大会，论坛报告，2024年10月，深圳

Cao F. Brain changes with reading development in Chinese individuals with RD.

Reading in the alternative populations, June, 2023, The educational University of Hong Kong. ***Session Chair.***

Cao F. Two possible endophenotypes of reading disability. The *6th Annual Asian Reading and Writing Association Conference, Feb. 2022, Hong Kong.* **Session Chair**

Cao F, Yan X, Deng Y. Neural signature of phonological deficits in Chinese children with developmental dyslexia. The *16th International Conference on the Processing of East Asian Languages, Dec. 2016, Guangzhou, China.*

Kim S*, Liu L, & **Cao F**. Is Korean more similar to Chinese than to English? An fMRI study on Korean-Chinese-English trilinguals. The *10th International Conference on Cognitive Science, Sep. 2015, Torino, Italy.*

Cao F. High proficiency in a second language is characterized by greater involvement of the first language network. The 9th *International Symposium of Bilingualism, June, 2013, Singapore.*

Cao F, Vu M, Chan H, Lawrence J, Harris L, Guan Q, Xu Y & Perfetti CA. Writing helps reading: Evidence from learning Chinese. *Society of Scientific Studies of Reading, July, 2011, St. Pete Beach, Fl.*

Conference Posters

Fu Y & **Cao F.** Energy Landscape Analysis of Brain Network Dynamics in Individuals with Reading Disability. The *OHBM, June, 2026, France*

Fu Y & **Cao F.** Age differences in foreign speech learning: an inter-brain synchrony approach. *The Society for Neurobiology of Language, September 2025, Washington DC, USA.*

Hua M & **Cao F.** Different brain responses to reading intervention in children and adults with reading disability. *The Society for Neurobiology of Language, September 2025, Washington DC, USA.*

Yan X, & **Cao F.** An age-related posterior to anterior shift in the left OT area in Chinese readers with reading disability*. The Society for Neurobiology of Language, October 2024, Brisbane, Australia.*

Shen L, Feng G, & **Cao F**. the effectiveness of intervention in Chinese children with reading disability. *Society for the Scientific Studies of Reading, July, 2024, Copenhagen，Denmark.*

Yan X, & **Cao F.** An age-related posterior to anterior shift in the left OT area in Chinese readers with reading disability. The *OHBM, June, 2024, Korea.*

Yan, & **Cao F.** An age-related posterior to anterior shift in the left OT area in Chinese readers with reading disability. The *8th Annual Asian Reading and Writing Association Conference, Feb. 2024, Korea.*

Mao J, & **Cao F.** How does age and musical training experience affect foreign speech imitation? *Society for Neurobiology of Language, October, 2023, Marseille, France.*

Wu Y, Feng G, & **Cao F.** Brain changes following a phonological and a morphological intervention in Chinese children with reading disability*. Society for Neurobiology of Language, October, 2023, Marseille, France.*

Zhang Q, Yan X, & **Cao F**. Bilingual dyslexic children show both language universal and language specific deficit in the brain. *Society for Neurobiology of Language, August, 2019, Helsinki, Finland.*

Yan X, Spray G, Liu Y, & **Cao F.** Neural Correlates of visuo- orthographic processing in Chinese children with developmental dyslexia. *CNS, April, 2017, San Francisco.*

Dodson-Garrett M, Chen W, Yan X, Deng Y & **Cao F**. Assimilation takes time to happen in the brain: a comparison between bilingual children and bilingual adults. *MSHA, April, 2017, Grand Rapid, Michigan*.

Rios V, Sussman B, & **Cao F.** The transfer effect of L1 metalinguistic skills in Chinese and Spanish L2 learning. *MSHA, April, 2016, Grand Rapid, Michigan.*

Spray G, Kim S, & **Cao F.** Neural Correlates of spoken language processing in Korean-Chinese-English trilinguals. *MSHA, April, 2016, Grand Rapid, Michigan.*

Yan X, & **Cao F.** Neural Correlates of visuo- orthographic processing in Chinese children with developmental dyslexia. *MSHA, April, 2016, Grand Rapid, Michigan.*

Sussman B & **Cao F.** The development of white matter integrity in Chinese children. *The Annual Conference of Society for Neuroscience, October, 2015, Chicago.*

Yan X, & **Cao F.** Neural Correlates of phonological and orthographic processing in Chinese children with developmental dyslexia. *The Annual Conference of Society for Neuroscience, October, 2015, Chicago.*

Lagarrigue A, Longcamp M, Anton J, Nazarian B, Prevot L, Velay J, **Cao F**, Frenck-Mestre C. The neural network of reading: Does writing help the brain accommodate for linguistic diversity? *The 7th conference of Society for Neurobiology of Language Conference, October, 2015, Chicago.*

Sussman B & **Cao F.** The development of white matter integrity in Chinese children. *The 7th conference of Society for Neurobiology of Language Conference, October, 2015, Chicago.*

Yan X, & **Cao F.** Neural Correlates of phonological and orthographic processing in Chinese children with developmental dyslexia. *The 7th conference of Society for Neurobiology of Language Conference, October, 2015, Chicago.*

Kim S, & **Cao, F.** The effect of first language on brain reading network in second language: Evidence from Korean-English and Chinese-English bilingual groups. *The 7th conference of Society for Neurobiology of Language Conference, October, 2015, Chicago.*

Kim S, & **Cao, F.** Assimilation and accommodation in non-native reading networks: Evidence from Korean-Chinese-English multilinguals. *The 6th Society for Neurobiology of Language Conference, August, 2014, Amsterdam, Netherlands*.

Cao F, Kim S, Liu Y & Liu L. Similarities and differences in brain activation and functional connectivity in first and second language reading: Evidence from Chinese learners of English. *Cognitive Neuroscience Society, April, 2014, Boston, MA.*

Kim SY, Liu Y, & **Cao F**. Same reading network but different connectivity for first and second language: Evidence from Chinese learners of English. *The 43rd Annual Meeting of the Society for Neuroscience, November, 2013, San Diego, CA, USA*.

Cao F, Liu L, Tao R & Booth JR. High proficiency in a second language is characterized by greater involvement of the first language network. *Cognitive Neuroscience Society, April, 2013, San Francisco, CA.*

Cao F, Liu L, Tao R & Booth JR. High proficient bilinguals show greater assimilation: evidence from late Chinese-English bilinguals. *Organization of Human Brain Mapping, June, 2012, Beijing, China.*

Kwok F, Ho R, **Cao F**, Chen A. A meta-analysis study on Chinese dyslexia. *Organization of Human Brain Mapping, June, 2012, Beijing, China.*

Brennan C, **Cao F**, Pedroarena-Laele N, McNorgan C & Booth JR Learning to reading reorganizes the oral language network only in alphabetic writing systems. *Cognitive Neuroscience Society, April, 2012, Chicago, IL.*

Cao F, Vu M, Chan H, Lawrence J, Harris L, Guan Q, Xu Y & Perfetti CA. Writing changes the brain network of reading in Chinese: an fMRI study. *Organization of Human Brain Mapping, June, 2011, Quebec, Canada.*

Cao F, Vu M, Chan H, Lawrence J, Harris L, Guan Q, Xu Y & Perfetti C. Writing helps reading in English learners of Chinese: an fMRI study. *Society for Neuroscience, November, 2010, San Diego, CA.*

Brennan C, **Cao F,** & Booth JR. Cultural constraints on brain development – Evidence from a Chinese visual word processing study. *Organization of Human Brian Mapping, June, 2010, Barcelona, Spain.*

Cao F, Lee R, Shu H, Yang Y, Xu G, Li K & Booth JR. Cultural constraints on brain development – Evidence from a Chinese visual word processing study. *Organization of Human Brian Mapping, June, 2009, San Francisco, CA.*

Bolger DJ, Gray J, Minas J, **Cao F**, Burman DD, Booth JR. Differential effects of phonological and orthographic consistency in cortex in children with and without reading disorders. *Society for the Scientific Studies of Reading: June, 2009, Boston, MA.*

Bolger DJ, Minas J, **Cao F**, Burman DD, Booth JR. Phonological and orthographic consistency effects in cortex for normal and impaired readers. *Cognitive Science Society: July, 2008, Washington, DC.*

Bolger DJ, Minas J, **Cao F**, Burman DD, Booth JR. Differential effects of phonological and orthographic consistency in cortex for children with and without reading disorders*. Society for Scientific Studies of Reading: July, 2008, Asheville, NC.*

Cao F, Peng DL, Liu L, Jin Z, Fan N, Deng Y & Booth JR. Developmental differences of neurocognitive networks for phonological and semantics processing in Chinese word reading. *Cognitive Neuroscience Society: April, 2008, San Francisco, CA.*

Zaveri R, **Cao F**, Bolger DJ & Booth JR. Orthographic and phonological cortical priming effects in children during spoken language processing. *Cognitive Neuroscience Society: April, 2008, San Francisco, CA.*

Liu L, Deng X, Peng D, **Cao F**, Ding G , Jin Z , Zeng Y, Li K, Zhu L, Fan N, Deng Y & Booth JR. Modality- and task-specific brain regions involved in Chinese lexical processing. *Cognitive Neuroscience Society: April, 2008, San Francisco, CA.*

Cao F, Bitan T, Chou T, Burman D, & Booth JR. Altered brain activity and connectivity of children with dyslexia during phonological processing. *Organization of Human Brian Mapping, June, 2007, Chicago, IL.*

Booth JR, Bitan T, **Cao F**, Chou T, Bebko G, Burman DD. Development changes in activation patterns and effective connectivity during phonological and semantic processing and its breakdown in reading disorders. *Cognitive Neuroscience Society: May, 2007, New York, NY.*

Cao F, Shu H, Booth JR, & Shan B. Phonological access of Chinese characters' components: Evidence from an fMRI study. *Cognitive Neuroscience Society Annual Conference, April 2005, New York, NY.*

Cao F & Shu H. The role of phonological and morphological processing in learning to read: Evidence from normal and dyslexic children. *The Tenth International Conference on Cognitive Processing of Chinese and Other Related Asian Languages (ICCPCORAL, 2002, Taipei, Taiwan).*

Invited Talks

May, 2025	Guangdong University of Foreign Studies, Guangzhou
February, 2023	State Key Lab of Cognitive Neuroscience and Learning, Beijing Normal University
February, 2022	Department of Communication Sciences and Disorders, University of South Carolina
February, 2021	Department of Psychology, Chinese University of Hong Kong
February, 2021	Center of Brian and Cognition, University of Macau
June, 2020	Bilingualism Forum, Center for Linguistics and Applied Linguistics, Guangdong University of Foreign Studies
April, 2019	Autism forum, the Third Hospital affiliated with Sun Yat-Sen University
April, 2017	Department of Psychology, Sun Yat-Sen University
December, 2016	State Key lab of learning and cognitive neuroscience, Beijing Normal University, Beijing
December, 2016	Language research center, Beijing Science and Technology University, Beijing
December, 2016	Department of Psychology, Tsinghua University, Beijing
January, 2015	Cognitive Forum, Psychology department, Michigan State University
June, 2014	Brain and Language Research Institute (BLRI), Aix-Marseille Université, France
April, 2014	Michigan Dyslexia Institute
December, 2011	National Institute of Education, Nanyang Technological University
March, 2011	School of Education, University of California, Davis
February, 2011	School of Humanities and Social Sciences, Nanyang Technological University, Singapore
February, 2011	Institute of Psychology, Chinese Academy of Sciences
February, 2011	Department of Psychology, Peking University
April, 2009	Department of Psychology, Penn State University
March, 2009	LRDC, University of Pittsburgh

Courses taught

2023 Spring-	Psych7303 Biological Psychology (Master level), University of Hong Kong
2023 Spring-	Psych2110 Developmental Neuroscience, University of Hong Kong

2022 Spring-2026	Psych2067 Seminar in Cognitive Sciences, University of Hong Kong
2022 spring-	Psych2022 Biological Psychology, University of Hong Kong
2020 Spring-2022	PSYCH4120 Neurophysiology, *Sun Yat-Sen University*
2020 Fall-2022	PSYCH5120 Child and adolescent development, *Sun Yat-Sen University*
2017 Spring-2022	PSYCH5220 Developmental cognitive disorders, *Sun Yat-Sen University*
2017 Fall -2022	PSYCH5010 Advanced Research methods-fMRI, *Sun Yat-Sen University*
2016 Spring-2017 Spring	CSD 992 Special Topic: Developmental dyslexia, *Michigan State University*
2015 Fall-2017 Fall	CSD 991 Research survey, *Michigan State University*
2015 Spring-2016 Spring	CSD 820 Language assessment and intervention: Early stages, *Michigan State University*
2014 Fall-2017 Fall	CSD 813 Neuroanatomy and neurophysiology, *Michigan State University*
2011-2013	HSS 809 Reading development and disorders, *Nanyang Technological University, Singapore*

Student Mentorship

Postdoctoral research fellowship

Bethany Sussman, Ph.D., Communication Sciences and Disorders, Michigan State University, 2014-2016
Say Young Kim, Ph.D., Division of Psychology, School of Humanities and Social Sciences, Nanyang Technological University, Singapore, 2011-2013

Ph.D. Dissertation Chair

Guandoudou Yang, Department of Psychology, the University of Hong Kong, 2026-2030
Yang Fu, Department of Psychology, the University of Hong Kong, 2024-2028
Guoyan Feng, Department of Psychology, Sun Yat-Sen University, 2018-2023
Gregary J. Spray, Communication Sciences and Disorders, Michigan State University, 2014-2019
Hengshuang Liu, Division of Psychology, Nanyang Technological University, Singapore, 2011-2014

MPhil's Thesis Chair

Xinrui Li, Department of Psychology, the University of Hong Kong, 2026-2028
Fengzhu Zuo, Department of Psychology, the University of Hong Kong, 2026-2028
Leo Shu Yuen So, Department of Psychology, the University of Hong Kong, 2026-2028
Yue Wang, Department of Psychology, the University of Hong Kong, 2025-2027
Mingyang Hua, Department of Psychology, the University of Hong Kong, 2024-2026
Xin Wang, Department of Psychology, Sun Yat-Sen University, 2020-2023

Anqi Wang, Department of Psychology, Sun Yat-Sen University, 2020-2023
Yang Fu, Department of Psychology, Sun Yat-Sen University, 2019-2022
Jiaqi Mao, Department of Psychology, Sun Yat-Sen University, 2017-2021
Valeria Rios, CSD, Michigan State University, 2014-2016

Master of Educational Psychology Thesis Chair

CHAM Hiu Lam Clare, Department of Psychology, the University of Hong Kong, 2026-2028
YIP Wing Hei Yuri, Department of Psychology, the University of Hong Kong, 2026-2028
CHU Pik Hung Pinky, Department of Psychology, the University of Hong Kong, 2026-2028
Kai Lin Agnes Lee, Department of Psychology, the University of Hong Kong, 2024-2026
Yan To Total Poon, Department of Psychology, the University of Hong Kong, 2024-2026

Master of Social Science in Psychology Thesis Chair

Zixin Ma, Department of Psychology, the University of Hong Kong, 2024-2025
Cheuk Wing Kong, Department of Psychology, the University of Hong Kong, 2023-2024
Jieru Bai, Department of Psychology, the University of Hong Kong, 2022-2023
Yizhen Guo, Department of Psychology, the University of Hong Kong, 2022-2023
Dong Shiyue, Department of Psychology, the University of Hong Kong, 2022-2023
Wei Shilan, Department of Psychology, the University of Hong Kong, 2022-2023
Kwok Hei Wut, Department of Psychology, the University of Hong Kong, 2022-2023
Tso Wai Chun Regine, Department of Psychology, the University of Hong Kong, 2022-2023

Senior Honors Thesis Supervisor

Amber Seng Ying Wong, Department of Psychology, the University of Hong Kong, 2027
Aglaia Dubina, Department of Psychology, the University of Hong Kong, 2027
Hiu Lam Chen, (URFP) Department of Psychology, the University of Hong Kong, 2026
Yuqi Yuan, Department of Psychology, the University of Hong Kong, 2026
Mingyang Hua, Department of Psychology, the University of Hong Kong, 2024
Jade Hau Yi Fok, (URFP) Department of Psychology, the University of Hong Kong, 2024
Hazel Tsz Hei Leung, Department of Psychology, the University of Hong Kong, 2023
Canye Zhang, Department of Psychology, Sun Yat-Sen University, 2021
Tianqing Chen, Department of Psychology, Sun Yat-Sen University, 2021
Simeng Luo, Department of Psychology, Sun Yat-Sen University, 2020
Linling Shen, Department of Psychology, Sun Yat-Sen University, 2020
Qingrui Cai, Department of Psychology, Sun Yat-Sen University, 2019
Yunlong Tan, Department of Psychology, Sun Yat-Sen University, 2019

Mentored Undergraduate Research Honors college

Maddie Dodson-Garrett, CSD, Michigan State University 2015-2017
Ryan M. Mack, CSD, Michigan State University 2014-2016

Services

2025-	Internal Examiner for the MSocSc(Psy) programme, Department of Psychology, the University of Hong Kong
2023-2025	Faculty representative in the Discontinuation Committee at the University of Hong Kong
2023-	Departmental representative in the Faculty for the Higher Degree in Social Sciences Committee, the University of Hong Kong
2025-	Member of the Public Relationship Committee, Department of Psychology, the University of Hong Kong
2023-	Member of the Ethics Review Committee, Department of Psychology, the University of Hong Kong
2023-	Data Protection Coordinator, Department of Psychology, the University of Hong Kong
2017-2022	Faculty search and promotion committee, Psychology Department, Sun Yat-Sen University Graduate study and admission committee, Psychology Department, Sun Yat-Sen University
2016-2017	CAS, Michigan State University, College Advisory Council CSD representative CSD, Michigan State University, Department Advisory Committee CSD, Michigan State University, Faculty search committee
2014-2017	CSD, Michigan State University, Graduate admission committee CSD, Michigan State University, Curriculum committee CSD, Michigan State University, Grievance committee

Grant Reviewer

Research Grants Council (RGC) of Hong Kong
National Sciences and Engineering Research Council of Canada
American Speech-Language-Hearing Association
Medical Research Council, UK

Ad-hoc Journal Reviewer

Cerebral cortex
Human Brain Mapping
NeuroImage
Journal of Neuroscience
European Journal of Neuroscience
Memory and Cognition
Journal of Experimental Child Psychology
Language Learning and Development
Brain Research
Brain and Language
Bilingualism: Language and Cognition
Cognition

Professional Affiliations

Asian Reading and Writing Association
Society of Scientific Studies of Reading
Society for the Neurobiology of Language
Society for Neuroscience
Cognitive Neuroscience Society
Organization of Human Brain Mapping