

## YEE LEE SHING

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### EDUCATION AND DEGREES

**2004 – 2008**

**Humboldt-Universität zu Berlin, Germany**

Dr. rer. nat. (PhD), Summa cum Laude

Center for Lifespan Psychology, Max Planck Institute for Human  
Development, Berlin, Germany

Dissertation Thesis: *Dynamics of Episodic Memory Across the Lifespan:  
Interaction Between Associative and Strategic Components*

Advisors: Prof. Dr. Ulman Lindenberger, Dr. Shu-Chen Li

Predocutorial Research Fellow, International Max Planck Research School  
LIFE: “*The Life Course: Evolutionary and Ontogenetic Dynamics*”

**2002 – 2003**

**University of Georgia, GA, USA**

Master of Arts, CGPA: 4.0

Major: Educational Psychology (Applied Cognition and Development)

Master’s Thesis: *Conceptual, Procedural, and Metastrategic Knowledge in  
Mathematics*

Advisor: Prof. Martha Carr

**2000 – 2002**

**University of Nebraska at Omaha, NE, USA**

Bachelor of Science, Magna cum Laude

Major: Psychology, Minor: Mathematics

Senior Thesis: *Academic Orientation and the Use of Visual-Spatial  
Representation as a Problem-Solving Tool*

**1998 – 1999**

**Taylor’s College, Kuala Lumpur, Malaysia**

Associate Diploma, CGPA: 3.7

Area of Concentration: Science

### RESEARCH INTERESTS

- Theories of lifespan and developmental psychology
- The development and plasticity of basic cognitive mechanics and intellectual functioning over the lifespan
- Neural mechanisms underlying memory development and aging
- Predictive processing and memory systems
- Environmental influences on early cognitive and brain development
- Multivariate analyses of developmental and change processes

**PROFESSIONAL EXPERIENCE**

- Since 01/2018      W3 Professor in Developmental Psychology, Goethe-Universität Frankfurt am Main  
Principal Investigator of Lifespan Cognitive and Brain Development (LISCO) Lab  
Member of Center for Individual Development and Adaptive Education of Children at Risk (IDeA), Frankfurt, Germany
- Since 01/2017      Adjunct Researcher, Max Planck Institute for Human Development, Berlin, Germany
- Since 05/2012      Faculty member of the International Max Planck Research School on the Life Course (LIFE)
- 08/2015 – 12/2017    Lecturer, Division of Psychology, University of Stirling, UK
- 01/2012 – 12/2016    Minerva research group leader, Max Planck Institute for Human Development, Berlin, Germany  
Reduced to 20% appointment in 08/2015  
Adjunct Researcher since 12/2016  
W: <https://www.mpib-berlin.mpg.de/en/staff/ye-lee-shing>
- 04/2012 – 08/2012    Vertretungsprofessur (Visiting Professor), Entwicklungspsychologie (Developmental Psychology), Universität Hamburg
- 03/2011              Primo loco, W2 Professorship in Aging and Cognition, German Center for Neurodegenerative Diseases, Magdeburg, Germany (offer declined)
- 01/2010 – 12/2011    Research Scientist at the Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany
- 10/2008 – 12/2009    Postdoctoral Alexander von Humboldt Research Fellow at the Humboldt-Universität zu Berlin, Germany (Host: Prof. Florian Schmiedek)
- 10/2007 – 09/2008    Postdoctoral Research Fellow at the Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany
- 10/2004 – 09/2007    Predoctoral Research Fellow at the Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin, Germany
- 08/2002 – 08/2004    Graduate Research Assistant for Dr. Martha Carr, Department of Educational Psychology, University of Georgia in NSF funded project “*Early Influences on Gender Differences in Mathematics Achievement*”
- 08/2000 – 05/2002    Research Assistant for Dr. Isabelle Cherney, Department of Psychology, University of Nebraska at Omaha and Creighton University in project titled “*Gender-Linked Differences in the Development of Incidental and Intentional Memory for Static and Dynamic Stimuli*”

12/2000 – 05/2002 Research Assistant for Dr. Lauree Tilton-Weaver, Department of Psychology, University of Nebraska at Omaha in project titled “*Parents and Adolescents in Relationships*”

## GRANTS AND AWARDS

- 2021 – 2025 Principal investigator, “The Adaptive Mind” Cluster Project, Hessisches Ministerium für Wissenschaft und Kunst (Spokesperson: Karl Gegenfurtner)
- 2018 – 2023 Principal investigator, project “*Predictive Memory Systems Across the Lifespan*,” European Research Council Starting Grant, ERC-2018-StG-PIVOTAL-758898, ~1410000€
- 2018 – 2022 Principal investigator (together with Claudia Buss and Angela Kaindl, Charité Universitätsmedizin Berlin), subproject “*Ontogenesis of Memory Consolidation: A Longitudinal Perspective*,” Collaborative Research Centre (SFB1315, Mechanisms and disturbances in memory consolidation: From synapses to systems), German Research Foundation, ~466000€
- 2018 – 2020 Jacobs Foundation Research Fellow, CHF 165000
- 2017 – 2019 Principal investigator, (co-PIs: Emma R. Wood, University of Edinburgh; Rosamund F. Langston, University of Dundee), project “*Development of Hippocampal Binding in Memory: An Investigation Linking Rodents and Humans*,” Carnegie Collaborative Research Grants, 50000 GBP
- 2015 – 2018 Principal investigator (together with Christine Heim, Charité, Universitätsmedizin Berlin), project “*Delineating the Contribution of Glucocorticoid Pathways to Stress-Related Social Disparities in Cognitive Child Development*,” Jacobs Foundation, Grant 2014–1151, 500000€
- 2015 – 2020 Co-investigator, subproject 2 of the cooperative research consortium “*Energizing the Hippocampus in Aging Individuals (Energl): Metabolic and Neural Crossroads Linking Training to Plasticity*,” BMBF Förderinitiative Neuronale Grundlagen des aktiven Alterns, ~586000€
- 2014 – 2016 Co-investigator (PI: Markus Werkle-Bergner, MPIB), project “*Hippocampal Subfield Contributions to Episodic Memory Formation: Child-Developmental Trends and Interaction with Top-Down Control During Adulthood*,” Deutsche Forschungsgemeinschaft (German Research Foundation), ~200000€
- 2012 Heinz Maier-Leibnitz-Preis, Deutsche Forschungsgemeinschaft (German Research Foundation)  
*The prize is awarded to young researchers as a distinction for outstanding achievement*  
 ([http://www.dfg.de/en/research\\_funding/programmes/prizes/maier\\_leibnitz\\_prize/in\\_brief/index.html](http://www.dfg.de/en/research_funding/programmes/prizes/maier_leibnitz_prize/in_brief/index.html))

- 2011 – 2013 Principal investigator (Co-investigator: Yvonne Brehmer), project “*Neural Mechanisms of Lifespan Age Differences in Episodic Memory Formation: Separating Associative and Strategic Components,*”  
Deutsche Forschungsgemeinschaft (German Research Foundation), ~100000€
- 2011 Conference Travel Grant: International Conference on Cognitive Neuroscience  
German Academic Exchange Service, Germany
- 2009 Otto Hahn Medal for Outstanding Dissertation, Max Planck Society
- 2009 Alexander von Humboldt Research Fellowship for Postdoctoral Researchers
- 2004 – 2007 Doctoral stipend in graduate program of International Max Planck Research School “*The Life Course: Evolutionary and Ontogenetic Dynamics (LIFE)*”
- 2002 – 2004 P.E.O. International Peace Scholarship Fund, \$9000
- 2002 Ambassador’s Award (Embassy of Malaysia in the United States)
- 2001 Frank Bellinghiere Memorial Scholarship, \$500
- 2000 – 2002 UNOmaha Non-Residential Scholarship
- 2001 University Committee on Research Award, UNOmaha, project “*Problem-Solving Strategies and Academic Orientation*”
- 2001 University Committee on Research Award, UNOmaha, project “*The Effects of Chronic Mild Stress and Fluoxetine on Body Temperature*”

## **TEACHING EXPERIENCE**

- Since 01/2018 Bachelor/master modules (lecture and seminar format) on Developmental Psychology/Developmental Cognitive Neuroscience/Developmental Psychopathology, Institute of Psychology, Goethe University Frankfurt
- 08/2015 – 12/2017 Coordinator for Undergraduate Final Year Modules, Psychology, University of Stirling
- 04/2012 – 08/2012 Seminars on Developmental Cognitive Neuroscience, Department of Psychology, Universität Hamburg
- 10/2011 Lecture on Human Research on Learning and Memory, International Graduate Program Medical Neurosciences, Charité - Universitätsmedizin Berlin
- 10/2010 Lecture on Human Research on Learning and Memory, International Graduate Program Medical Neurosciences, Charité - Universitätsmedizin Berlin

- Summer 2010 Seminar on Cognitive Neuroscience of Memory Across the Lifespan, Department of Psychology, Humboldt-Universität zu Berlin (co-taught with Dr. Markus Werkle-Bergner)
- 09/2009 Lecture on Human Research on Learning and Memory, International Graduate Program Medical Neurosciences, Charité - Universitätsmedizin Berlin
- Summer 2009 Seminar on Developmental Cognitive Neuroscience, Department of Psychology, Humboldt-Universität zu Berlin (co-taught with Dr. Sabine Schaefer)
- 09/2008 Lecture on Human Research on Learning and Memory, International Graduate Program Medical Neurosciences, Charité - Universitätsmedizin Berlin
- Summer 2008 Seminar on Developmental Cognitive Neuroscience, Department of Psychology, Freie Universität Berlin (co-taught with Dr. Sabine Schaefer)
- Summer 2006 Seminar on Developmental Cognitive Neuroscience, Department of Psychology, Humboldt-Universität zu Berlin (co-taught with Dr. Sabine Schaefer)

#### **OTHER UNIVERSITY COMMITMENTS**

- Since 2021 Member of the ethics committee for the Faculty of Psychology and Sports Sciences
- Since 2019 Member of the Fachbereichsrat (faculty council) for the Faculty of Psychology and Sports Sciences

#### **LIST OF PUBLICATIONS**

**Underlined authors are current or former trainees (postdoctoral, graduate, undergraduate, and research assistants).**

##### **Preprints or Manuscripts Under Review**

Keresztes, A., Raffington, A., Bender, A. R., Bögl, K., Heim, C., & Shing, Y. L. Longitudinal developmental trajectories do not follow cross-sectional age associations in hippocampal subfield and memory development. [biorxiv](#)

Ortiz-Tudela, J., Bergmann, J., Bennett, M., Ehrlich, I., Muckli, L., & Shing, Y. L. Concurrent contextual and time-distant mnemonic information co-exist as feedback in human visual cortex. [biorxiv](#)

Schuck, N.W., Li, A.X., Wenke, D., Ay, D. S., Loewe, A., Gaschler, R., **Shing, Y. L.** Flexible decision strategy improvements in children. [psyarxiv](#)

##### **Peer-Reviewed Journal Articles**

Nolden, S., Brod, G., Meyer, A.-K., Fandakova, Y., & Shing, Y. L. (2021). Neural correlates of successful memory encoding in kindergarten and early elementary school children:

Longitudinal trends and effects of schooling. *Cerebral Cortex*, bhab046. doi: 10.1093/cercor/bhab046

McKay, C., **Shing, Y. L.**, Rafetseder, E., Wijekumar, S. (2021). Home assessment of visual working memory in pre-schoolers reveals associations between behavior, brain activation and parent reports of life stress. *Developmental Science*, e13094. doi: 10.1111/desc.13094

Raffington, L., Falck, J., Heim, C., Mather, M., & **Shing, Y. L.** (2020). Effects of stress and cortisol levels on prepubescent children's emotional memory differ by sex. *Journal of Experimental Child Psychology*, 199, Article 104924. doi: 10.1016/j.jecp.2020.104924

Keresztes, A., Raffington, L., Bender, A. R., Bögl, K., Heim, C.\*, & **Shing, Y. L.\*** (2020). Hair cortisol concentrations are associated with hippocampal subregional volumes in children. *Scientific Reports*, 10, Article 4865. doi: 10.1038/s41598-020-61131-x

\*joint senior author

Mühlroth, B. E., Sander, M. C., Fandakova, Y., Grandy, T. H., Rasch, B., **Shing, Y. L.**, & Werkle-Bergner, M. (2020). Memory quality modulates the effect of aging on memory consolidation during sleep: Reduced maintenance but intact gain. *NeuroImage*, 209: 116490. doi: 10.1016/j.neuroimage.2019.116490

Sander, M. C., Fandakova, Y., Grandy, T. H., **Shing, Y. L.**, & Werkle-Bergner, M. (2020). Oscillatory mechanisms of successful memory formation in younger and older adults are related to structural integrity. *Cerebral Cortex*, 30(6), 3744–3758. doi: 10.1093/cercor/bhz339

Filevich, E., Forlim, C. G., Fehrman, C., Forster, C., Paulus, M., **Shing, Y. L.\***, Kühn, S.\* (2020). I know that I know nothing: Cortical thickness and functional connectivity underlying meta-ignorance ability in pre-schoolers. *Developmental Cognitive Neuroscience*, 41: 100738. <https://doi.org/10.1016/j.dcn.2019.100738>

\*joint senior author

Raffington, L., Czamara, D., Mohn, J. J., Falck, J., Schmall, V., Heim, C., Binder, E., & **Shing, Y. L.** (2019). Stable longitudinal associations of family income with children's hippocampal volume and memory persist after controlling for polygenic scores of educational attainment. *Developmental Cognitive Neuroscience*, 40, Article 100720. doi: 10.1016/j.dcn.2019.100720

Sommer, V., Fandakova, Y., Grandy, T., **Shing, Y. L.**, Werkle-Bergner, M., Sander, M. (2019). Neural pattern similarity differentially related to memory performance in younger and older adults. *Journal of Neuroscience*, 39, 8089–8099. doi: 10.1523/JNEUROSCI.0197-19.2019

Wulff, D. U., De Deyne, S., Jones, M. N. Mata, R., & the Aging Lexicon Consortium (2019). New perspectives on the aging lexicon. *Trends in Cognitive Science*, 23, 686–698. doi: 10.1016/j.tics.2019.05.003

**Shing, Y. L.**, Finke, C., Hoffmann, M., Pajkert, A. Heekeren, H. R., Ploner, C. J. (2019). Integrating across memory episodes: Developmental trend. *PLoS ONE*. 14(4): e0215848. doi: 10.1371/journal.pone.0215848.

- Brod, G. & **Shing, Y. L.** (2019). A boon and a bane: Comparing the effects of prior knowledge on memory across the lifespan. *Developmental Psychology*, *55*, 1326 – 1337. doi: 10.1037/dev0000712
- Muehlroth, B. E., Sander, M. C., Fandakova, Y., Grandy, T. H., Rasch, B., **Shing, Y. L.**, & Werkle-Bergner, M. (2019). Precise slow oscillation-spindle coupling promotes memory consolidation in younger and older adults. *Scientific Reports*, *9(1):1940*. doi: 10.1038/s41598-018-36557-z
- Ψ Raffington, L., Prindle, J. J., & **Shing, Y. L.** (2018). Income gains predict cognition throughout later childhood in poor children. *Developmental Psychology*, *54(7)*, 1232–1243. doi:10.1037/dev0000529
- Fandakova, Y., Sander, M. C., Grandy, T. H., Werkle-Bergner, M., & **Shing, Y. L.** (2018). Age differences in false memory: The importance of retrieval monitoring processes and their modulation by memory quality. *Psychology and Aging*, *33*, 119–133. doi: 10.1037/pag0000212
- Fine, H. C., **Shing, Y. L.**, & Naveh-Benjamin, M. (2018). Effects of changes in schematic support and of item repetition on age-related associative memory deficits: Theoretically-driven empirical attempts to reduce older adults' high false alarm rate. *Psychology and Aging*, *33*, 57–73. doi: 10.1037/pag0000211
- Ψ Raffington, L., Prindle, J., Keresztes, A., Binder, E., Heim, C., **Shing, Y. L.** (2018). Blunted cortisol stress reactivity in low-income children relates to lower memory function. *Psychoneuroendocrinology*, *90*, 110–121. doi: 10.1016/j.psyneuen.2018.02.002
- Bender, A., Keresztes, A., Bodammer, N., **Shing, Y. L.**, Werkle-Bergner, M., Daugherty, A., Yu, Q., Kuehn, S., Lindenberger, U., Raz, N. (2018). Optimization and validation of automated hippocampal subfield segmentation across the lifespan. *Human Brain Mapping*, *39*, 916–931. doi: 10.1002/hbm.23891
- Brod, G. & **Shing, Y. L.** (2018). Specifying the role of the ventromedial prefrontal cortex in memory formation. *Neuropsychologia*. 111, 8–15. doi: 10.1016/j.neuropsychologia.2018.01.005
- Raffington, L., Schmiedek, F., Heim, C., & **Shing, Y. L.** (2018). Cognitive control moderates parenting stress effects on children's diurnal cortisol. *PLoS ONE*, *13(1)*: e0191215. doi:10.1371/journal.pone.0191215
- Keresztes, A., Bender, A. R., Bodammer, N. C., Lindenberger, U., **Shing, Y. L.\***, Werkle-Bergner, M.\* (2017). Hippocampal maturity promotes memory distinctiveness in childhood and adolescence. *Proceedings of the National Academy of Sciences of the United States of America*, *114*, 9212–9217. doi:10.1073/pnas.1710654114
- \* co-senior authors
- Pajkert, A., Finke, C., **Shing, Y. L.**, Hoffmann, M., Sommer, W., Heekeren, H., Ploner, C. J. (2017). Memory integration in humans with hippocampal lesions: Selective disruption of integrative encoding. *Hippocampus*, *27*, 1230–1238. doi:10.1002/hipo.22766

- Brod, G., Bunge, S., & **Shing, Y. L.** (2017). Does one year of schooling improve children's cognitive control and alter associated brain activation? *Psychological Science*, 28, 967–978. doi:10.1177/0956797617699838
- Brod, G., Lindenberger, U., & **Shing, Y. L.** (2017). Neural activation patterns during retrieval of schema-related memories: Differences and commonalities between children and adults. *Developmental Science*, 20, e12475. doi: 10.1111/desc.12475
- Bellander, M., Berggren, R., Mårtensson, J., Brehmer, Y., Wenger, E., Li, T.-Q., Bodammer, N. C., **Shing, Y. L.**, Werkle-Bergner, M., & Lövdén, M. (2016). Behavioral correlates of changes in hippocampal grey matter structure during acquisition of foreign vocabulary. *Neuroimage*, 131, 205–213. doi:10.1016/j.neuroimage.2015.10.020
- Binder, J., Martin, M., Zöllig, J., Röcke, C., Mérillat, S., Eschen, A., Jäncke, L., & **Shing, Y. L.** (2016). Multi-domain training enhances executive attentional control. *Psychology and Aging*, 31, 390–408. doi:10.1037/pag0000081
- Brehmer, Y., **Shing, Y. L.**, Heekeren, H. R., Lindenberger, U., & Bäckman, L. (2016). Training-induced changes in subsequent memory effects: No major differences among children, younger adults, and older adults. *Neuroimage*, 131, 214–225. doi:10.1016/j.neuroimage.2015.11.074
- Brod, G., Lindenberger, U., Wagner, A., & **Shing, Y. L.** (2016). Knowledge acquisition during exam preparation improves memory and modulates memory formation. *Journal of Neuroscience*, 36(31), 8103–8111. doi:10.1523/jneurosci.0045-16.2016
- Shing, Y. L.**, Brehmer, Y., Heekeren, H. R., Bäckman, L., & Lindenberger, U. (2016). Neural activation patterns of successful episodic encoding: Reorganization during childhood, maintenance in old age. *Developmental Cognitive Neuroscience*, 20, 59–69. doi:10.1016/j.dcn.2016.06.003
- Shing, Y. L.** & Brod, G. (2016). Effects of prior knowledge on memory: Implications for education. *Mind, Brain, and Education*, 10, 153–161. doi:10.1111/mbe.12110
- Brod, G., Lindenberger, U., Werkle-Bergner, M., & **Shing, Y. L.** (2015). Differences in the neural signature of remembering schema-congruent and schema-incongruent events. *Neuroimage*, 117, 358–366. doi: 10.1016/j.neuroimage.2015.05.086
- Fandakova, Y., Lindenberger, U., & **Shing, Y. L.** (2015). Maintenance of youth-like processing protects against false memory in later adulthood. *Neurobiology of Aging*, 36, 933–941. doi:10.1016/j.neurobiolaging.2014.10.022
- Fandakova, Y., Lindenberger, U., & **Shing, Y. L.** (2014). Deficits in frontal and hippocampal modulation underlie adult age differences in episodic memory interference. *Cerebral Cortex*, 24(7), 1832–1844. doi:10.1093/cercor/bht034
- Fandakova, Y., Sander, M. C., Werkle-Bergner, M., & **Shing, Y. L.** (2014). Age differences in short-term memory binding are related to working memory performance across the lifespan. *Psychology and Aging*, 29(1), 140–149. doi: 10.1037/a0035347



\* Ofen, N. & **Shing, Y. L.** (2013). From perception to memory: Changes in memory systems across the lifespan. *Neuroscience and Biobehavioral Reviews*, *37*, 2258–2267. doi:10.1016/j.neubiorev.2013.04.006

\* **authors with equal contribution**

**Brod, G.**, Werkle-Bergner, M., & **Shing, Y. L.** (2013). The influence of prior knowledge on memory: A developmental cognitive neuroscience perspective. *Frontiers in Behavioral Neuroscience*, *7*:139. doi:10.3389/fnbeh.2013.00139

**Fandakova, Y.**, **Shing, Y. L.**, & Lindenberger, U. (2013). Differences in binding and monitoring mechanisms contribute to lifespan age differences in false memory. *Developmental Psychology*, *49*, 1822 – 1832. doi:10.1037/a0031361

**Fandakova, Y.**, **Shing, Y. L.**, & Lindenberger, U. (2013). High-confidence memory errors in old age: The roles of monitoring and binding processes. *Memory*, *21*, 732 –750. doi: 10.1080/09658211.2012.756038

**Fandakova, Y.**, **Shing, Y. L.**, & Lindenberger, U. (2012). Heterogeneity in memory training improvement among older adults: A latent class analysis. *Memory*, *20*(6), 554 – 567. doi: 10.1080/09658211.2012.687051

Sander, M. C., Werkle-Bergner, M., Gerjets, P., **Shing, Y. L.**, & Lindenberger, U. (2012). The two-component model of memory development, and its potential implications for educational settings. *Developmental Cognitive Neuroscience*, *2*(S1), S67–S77. doi: 10.1016/j.dcn.2011.11.005

**Shing, Y. L.**, Schmiedek, F., Lövdén, M., & Lindenberger, U. (2012). Memory updating practice across 100 days in the COGITO study. *Psychology and Aging*, *27*(2), 451–461. doi: 10.1037/a0025568

**Shing, Y. L.** & Lindenberger, U. (2012). The development of episodic memory across the lifespan: Integrating behavioral and neural evidence. *ISSBD Bulletin*, *1*(61), 11 – 16.

Burgmans, S., Gronenschild, E. H. B. M., Fandakova, Y., **Shing, Y. L.**, van Boxtel, M. P. J., Vuurman, E. F. P. M., Uylings, H. B. M., Jolles, J., Raz, N. (2011). Age differences in speed of processing are partially mediated by differences in axonal integrity. *Neuroimage*, *55*(3), 1287-1297. doi: 10.1016/j.neuroimage.2011.01.002

**Shing, Y. L.**, & Lindenberger, U. (2011). The development of episodic memory: Lifespan lessons. *Child Development Perspectives*, *5*, 148-155. doi: 10.1111/j.1750-8606.2011.00170.x

**Shing, Y. L.**, Rodrigue, K. M., Kennedy, K. M., Fandakova, Y., Bodammer, N., Werkle-Bergner, M., Lindenberger, U., & Raz, N. (2010). Hippocampal subfield volumes: Age, vascular risk, and correlation with associative memory. *Frontiers in Aging Neuroscience*, *1*(2). doi: 10.3389/fnagi.2011.00002

- Shing, Y. L.**, Lindenberger, U., Diamond, A., Li, S.-C., & Davidson, M.S. (2010). Memory maintenance and inhibitory control differentiate from early childhood to adolescence. *Developmental Neuropsychology*, *35*(6), 679-697. doi: 10.1080/87565641.2010.508546
- Shing, Y. L.**, Werkle-Bergner, M., Brehmer, Y., Mueller, V., Li, S.-C., & Lindenberger, U. (2010). Episodic memory across the lifespan: The contributions of associative and strategic components. *Neuroscience and Biobehavioral Reviews*, *34*, 1080-1091. doi: 10.1016/j.neubiorev.2009.11.002
- Li, S.-C., Lövdén, M., Schaefer, S., Schmiedek, F., **Shing, Y. L.**, Werkle-Bergner, M., & Lindenberger, U. (2009). The Center of Lifespan Psychology at the Max Planck Institute for Human Development: Conceptual agenda and illustration of research activities. *Acta Psychologica Sinica*, *41*, 1102-1122.
- Naveh-Benjamin, M., **Shing, Y. L.**, Kilb, A., Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2009). Adult age differences in memory for name-face associations: The effects of intentional and incidental learning. *Memory*, *17*(2), 220-232. doi: 10.1080/09658210802222183
- Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2009). Committing memory errors with high confidence: Older adults do but children don't. *Memory*, *17*(2), 169-179. doi: 10.1080/09658210802190596
- Werkle-Bergner, M., **Shing, Y. L.**, Mueller, V., Li, S.-C., & Lindenberger, U. (2009). EEG gamma-band synchronization in visual coding from childhood to old age: Evidence from evoked power and inter-trial phase locking. *Clinical Neurophysiology*, *120*, 1291-1302. doi: 10.1016/j.clinph.2009.04.012
- Cherney, I. D., & **Shing, Y. L.** (2008). Children's nurturance and self-determination rights: A cross-cultural perspective. *Journal of Social Issues*, *64*(4), 835-856.
- Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2008). Associative and strategic components of episodic memory: A lifespan dissociation. *Journal of Experimental Psychology: General*, *137*(3), 495-513. doi: 10.1037/0096-3445.137.3.495
- Lövdén, M., Li, S.-C., **Shing, Y. L.**, & Lindenberger, U. (2007). Within-person trial-to-trial variability precedes and predicts cognitive decline in old and very old age: Longitudinal data from the Berlin Aging study. *Neuropsychologia*, *45*, 2827-2838. doi: 10.1016/j.neuropsychologia.2007.05.005
- Li, S.-C., Brehmer, Y., **Shing, Y. L.**, Werkle-Bergner, M., & Lindenberger, U. (2006). Neuromodulation of associative and organizational plasticity across the life span: Empirical evidence and neurocomputational modeling. *Neuroscience and Biobehavioral Reviews*, *30*, 775-790. doi:10.1016/j.neubiorev.2006.06.004
- Book Chapter**
- Shing, Y. L.** (2017). Memory: Episodic. In N. A. Pachana (Ed.), *Encyclopedia of Geropsychology* (pp. 1490–1496). New York: Springer. doi: 10.1007/978-981-287-082-7\_151

- Wenger, E. & **Shing, Y. L.** (2016). Episodic memory. In T. Strobach & J. Karbach (Eds.), *Cognitive training: An overview of features and applications* (pp.69–80). New York: Springer.
- Fandakova, Y., Lindenberger, U., & **Shing, Y. L.** (2015). Episodic memory across the lifespan: General trajectories and modifiers. In D. R. Addis, M. Barense, & A. Duarte (Eds.), *The Wiley handbook on the cognitive neuroscience of memory* (pp. 309–325). Chichester: Wiley-Blackwell.
- Hertzog, C., & **Shing, Y. L.** (2011). Memory development across the life-span. In K. L. Fingerman, C. A. Berg, J. Smith & T. Antonucci (Eds.), *Handbook of life-span development* (pp. 299–330). New York: Springer Publishing Company.
- Lindenberger, U., **Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Dauvier, B. (2010). Composantes stratégique et associative de la mémoire épisodique: une évolution différenciée au cours de la vie. In A. de Ribaupierre, P. Ghisletta, T. Lecert, & J.-L. Roulin (Eds.), *Identité et spécificités de la psychologie différentielle* (pp. 49-71). Rennes : Presses Universitaires de Rennes.
- Shing, Y. L.**, Brehmer, Y., & Li, S.-C. (2008). Cognitive training and plasticity across the lifespan. In O.-S. Tan & S.-H. Seng (Eds.), *Cognitive modifiability in learning and assessment: International perspectives* (pp. 59-82). Singapore, Cengage Learning.

## INVITED TALKS

- 06/2021 *Memory and predictive processing across the lifespan.* Tilburg University, Department of Psychology
- 04/2021 *Predictive processing and memory: A lifespan outlook.* Cambridge Memory Meeting
- 02/2021 *The roles of memory for predictive processing.* Giersch Summer School & International Conference
- 12/2019 *Episodic memory across the lifespan.* Max Planck Institute for Empirical Aesthetics, Frankfurt, Germany
- 08/2018 *Environmental effects on learning and memory.* 6<sup>th</sup> Annual Flux Congress, Berlin, Germany
- 05/2018 *Socioeconomic disparities in neurocognitive developmen..* IDeA-Bilanzworkshop 2018, German Institute for International Educational Research, Frankfurt, Germany
- 05/2018 *Cognitive and brain development within environmental contexts.* Colloquium, Universität Bern.
- 02/2018 *Episodic memory across the lifespan.* Colloquium, University of Granada, Department of Psychology.
- 11/2017 *Episodic memory across the lifespan.* Colloquium, University of Aberdeen, Department of Psychology.
- 07/2017 *Episodic memory across the lifespan: Age and individual differences.* Conference “Complexity in Life-span Development” organized by Forschungskolleg Humanwissenschaften, Goethe University Frankfurt.
- 11/2016 *Episodic memory across the lifespan: Is aging the reversal of development?* 17th International Conference on Science and Society at the European Molecular Biology Laboratory (EMBL), Heidelberg, Germany.

- 10/2016 *Effects of school entry on neurocognitive development*  
International Symposium Series WS2016 Cultural Neuroscience: Empowering Human Development Globally, Technische Universität Dresden, Germany.
- 07/2014 *Memory errors in old age: The roles of associative and strategic components.*  
Keynote Speaker, Geneva Aging Series, University of Geneva.
- 12/2013 *Episodic memory across the lifespan: The roles of strategic and associative components.* Colloquium, Friedrich Schiller University of Jena, Department of General Psychology and Cognitive Neuroscience.
- 06/2013 *Episodic memory across the lifespan: The roles of strategic and associative components.* Colloquium, Charité, Universitätsmedizin Berlin, Berlin School of Mind and Brain.
- 07/2012 *Episodic Memory across the lifespan: Separating strategic and associative components.* Lecture Series, Department of Psychology, Saarland University, Saarbruecken.
- 10/2011 *Development of Episodic Memory Across the Lifespan*, Margret M. and Paul B. Baltes International Conference on Life-Span Plasticity of Brain and Behavior: A Cognitive Neuroscience Perspective, Wayne State University, Detroit, USA.

#### CONFERENCE PRESENTATIONS (SELECTIVE)

- Keresztes, A., Raffington, L., Heim, C. M., & **Shing, Y. L.** (2019). Hair cortisol concentrations are associated with hippocampal subregional volumes in early middle childhood. Symposium presentation at Neuroscience 2019 Annual Meeting, Chicago.
- Brod, G. & **Shing, Y. L.** (2016). How schooling influences children's memory: The effects of acquired schemas. Poster at the 20<sup>th</sup> Annual Meeting of the Cognitive Neuroscience Society, New York City.
- Shing, Y. L.** (2015). Dynamics of schema effects on episodic memory during child development and intensive learning. Symposium presentation at Psychologie & Gehirn 2015, Frankfurt, Germany (symposium co-chaired by **Yee Lee Shing** and Markus Werkle-Bergner).
- Shing, Y. L.**, Fandakova, Y., Sander, M. C., Cabeza, R., Lindenberger, U., & Werkle-Bergner, M. (2015). Age differences in the modulation of memory networks by representation quality. Symposium presentation at the 2015 Aging & Cognition Conference, Dortmund, Germany (symposium chaired by **Yee Lee Shing**).
- Brod, G., & **Shing, Y. L.** (2015). *Knowledge accumulation improves memory and reorganizes hippocampal – neocortical interactions.* Poster at Neuroscience 2015 Annual Meeting, Chicago.
- Brod, G., & **Shing, Y. L.** (2015). *Dynamics of Knowledge Effects on Memory During Child Development and Intensive Learning.* Poster at Flux Congress, Leiden.
- Brod, G., Lindenberger, U., & **Shing, Y. L.** (2014). *Remembering exceptions to the rule: Dorsolateral PFC and Striatum support memory for schema-incongruent events.* Talk at Neuroscience 2014 Annual Meeting, Washington D.C.

- Brod, G., Lindenberger, U., & **Shing, Y. L.** (2014). *Are there age differences in the effects of prior knowledge on memory?* Poster presented at the Annual Meeting of the Berlin Interdisciplinary Education Network (BIEN), Berlin, Germany.
- Brod, G., Lindenberger, U., & **Shing, Y. L.** (2014). *Investigating the effects of an experimentally-induced schema on memory.* Poster presented at the Organization for Human Brain Mapping 2014 Annual Meeting, Hamburg, Germany.
- Brod, G., Lindenberger, U., & **Shing, Y. L.** (2013). *The influence of prior knowledge on memory. A developmental cognitive neuroscience perspective.* Symposium presentation at the Developmental Psychology Section Meeting of the German Society for Psychological Research, Saarbrücken, Germany (symposium co-chaired by **Yee Lee Shing** & Markus Werkle-Bergner).
- Shing, Y. L.**, Lindenberger, U., Heekeren, H., Bäckman, L., Brehmer, Y. (2013). *Lifespan age differences in episodic memory formation.* Symposium presentation at the Developmental Psychology Section Meeting of the German Society for Psychological Research, Saarbrücken, Germany (symposium co-chaired by **Yee Lee Shing** & Markus Werkle-Bergner).
- Shing, Y. L.**, & Brehmer, Y. (2013). *Neural mechanisms of lifespan age differences in episodic memory formation and plasticity.* Symposium presentation at the 2013 Society for Research in Child Development Biennial Meeting, Seattle, USA (symposium co-chaired by **Yee Lee Shing** & Noa Ofen).
- Shing, Y. L.**, Lindenberger, U., Heekeren, H., Bäckman, L., Brehmer, Y. (2013). *Lifespan age differences in episodic memory formation.* Poster presented at the 20<sup>th</sup> Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA.
- Shing, Y. L.**, Fandakova, Y., & Lindenberger, U. (2011). *Adult age differences in the neuronal correlates of memory monitoring mechanisms.* Symposium presentation at the 11<sup>th</sup> International Conference on Cognitive Neuroscience, Palma, Spain.
- Shing, Y. L.**, Brehmer, Y., Heekeren, H., Bäckman, L., & Lindenberger, U. (2010). *Neural mechanisms of age differences in episodic memory formation and plasticity.* Symposium presentation at the 47<sup>th</sup> German Congress of Psychology, Bremen, Germany (symposium co-chaired by **Yee Lee Shing** & Markus Werkle-Bergner).
- Shing, Y. L.**, Rodrigue, K. M., Kennedy, K. M., Fandakova, Y., Bodammer, N., Werkle-Bergner, M., Lindenberger, U., & Raz, N. (2010). *Regional hippocampal structure: Differential aging and relations to associative recognition memory.* Poster presented at the 16<sup>th</sup> Annual Meeting of the Organization for Human Brain Mapping, Barcelona, Spain.
- Fandakova, Y., **Shing, Y. L.**, Lindenberger, U. (2010). *Age-related differences in the ability to monitor currently relevant memories.* Poster presented at the 22<sup>th</sup> Cognitive Aging Conference, Atlanta, Georgia, USA.
- Shing, Y. L.**, Schmiedek, F., Lövdén, M., & Lindenberger, U. (2009). *Practicing working memory and episodic memory: Modeling age and individual differences with time-*

*accuracy functions*. Symposium presentation at the XIXth Congress of Gerontology & Geriatrics, Paris, France.

**Shing, Y. L.**, Schmiedek, F., Lövdén, M., & Lindenberger, U. (2009). *Modeling age and individual differences in working memory with time-accuracy functions*. Selected for slide presentation at the 16<sup>th</sup> Annual Meeting of the Cognitive Neuroscience Society, San Francisco, USA.

**Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2008). *Associative and strategic components of episodic memory: A lifespan dissociation*. Symposium presented at the 2008 International Congress of Psychology, Berlin, Germany (symposium co-chaired by Prof. Marcus Hasselhorn & **Yee Lee Shing**).

**Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2008). *Associative and strategic components of episodic memory: A lifespan dissociation*. Poster presented at the 21<sup>th</sup> Cognitive Aging Conference, Atlanta, Georgia, USA.

Lindenberger, U., **Shing, Y. L.**, Brehmer, Y., Werkle-Bergner, M., & Li, S.-C. (2007). *Episodic memory across the lifespan*. Invited symposium at the 20<sup>th</sup> Cognitive Aging Conference, Adelaide, Australia.

**Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2007). *A lifespan developmental approach to dissociate strategic organization and associative binding of episodic memory*. Symposium presented at the 19<sup>th</sup> Association for Psychological Science Convention, Washington D.C., USA.

**Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2007). *Lifespan age differences in the susceptibility to high confidence error in episodic memory*. Poster presented at the 19<sup>th</sup> Association for Psychological Science Convention, Washington D.C., USA.

Carr, M. M., **Shing, Y. L.**, Janes, P. K., & Steiner, H. H. (2007). *Early gender differences in strategy use and fluency: Implications for the emergence of gender differences in mathematics*. Poster presented at the 2007 Society of Research in Child Development Biennial Meeting, Boston, USA.

Werkle-Bergner, M., **Shing, Y. L.**, Li, S.-C., & Lindenberger, U. (2006). *Lifespan age differences in episodic memory: Separating strategic and associative components*. Symposium presented at the 45<sup>th</sup> German Congress of Psychology, Nürnberg, Germany.

**Shing, Y. L.**, Werkle-Bergner, M., Li, S.-C., & Lindenberger, U. (2006). *Lifespan age differences in episodic memory: Separating strategic and associative components*. Poster presented at the 4<sup>th</sup> International Conference on Memory, Sydney, Australia.

Lindenberger, U., Brehmer, Y., **Shing, Y. L.**, Werkle-Bergner, M., Loevden, M., Mueller, V., & von Oertzen, T., Li, S.-C. (2006). *Episodic memory across the lifespan: Plasticity and components*. Plenary symposium presented at the 2006 Cognitive Aging Conference, Atlanta, Georgia, USA.

- Shing, Y. L.**, Carr, M., Miller, P., Janes, P., & Lewis, R. (2005). *Strategy variability and utilization deficiency in arithmetic problems*. Poster presented at the 2005 Society of Research in Child Development Biennial Meeting, Atlanta, Georgia, USA.
- Carr, M., **Shing, Y. L.**, Steiner, H., & Kyser, B. (2005). *A comparison of predictors of gender differences in calculation, geometry, and word problem-solving*. Poster presented at the 2005 Society of Research in Child Development Biennial Meeting, Atlanta, USA.
- Cherney, I. D., & **Shing, Y. L.** (2003, April). *Children's attitudes toward their rights: A cross-cultural perspective*. Poster presented at the 2003 Society of Research in Child Development Biennial Meeting, Tampa, Florida, USA.
- Shing, Y. L.**, Cherney, I. D., & Nadipuram, S. (2001). *Map drawing and the judgement of line angle and position (JLAP) test*. Poster presented at the 21<sup>st</sup> Annual Great Plains Students' Psychology Convention, Joplin, Missouri, USA.
- Hendricks, S.E., Wieseler-Frank, J.L., **Shing, Y. L.**, Sinclair, S.G., & Staup, M. (2001). *Effects of chronic mild stress on behavior in the forced swim test*. Poster presented at the Neuroscience 31<sup>st</sup> Annual Meeting, San Diego, USA.

## **PROFESSIONAL ACTIVITIES**

### **Ad-Hoc Manuscript Peer Review**

Acta Psychologica; Brain and Cognition; Cerebral Cortex; Cognitive Development; Current Opinions in Behavioral Sciences; Developmental Cognitive Neuroscience; Developmental Psychology; Developmental Science; Frontiers Journals; Human Brain Mapping; Journal of Cognitive Education and Psychology; Journal of Cognitive Neuroscience; Journal of Experimental Psychology: General; Journal of Experimental Psychology: Learning, Memory, and Cognition; Journal of Individual Differences; Journal of Neuroscience; NeuroImage; Neuroscience & Biobehavioral Reviews; Psychology and Aging; Psychological Research; Psychonomic Bulletin & Review

### **Grant Review**

German Research Foundation; European Research Council; Swiss National Science Foundation

### **Conference Review**

**2021** Member, Program Committee, FLUX Congress

## **ACADEMIC SUPERVISION**

### **Postdoctoral Trainees**

2020 – present	Francesco Pupillo
2018 – present	Sophie Nolden
2018 – present	Javier Ortiz-Tudela
2015 –2017	Attila Keresztes

### **Doctoral Advisee**

Since 2021	Johannes Falck (Goethe University Frankfurt)
Since 2019	Isabelle Ehrlich (Goethe University Frankfurt)
Since 2019	Gözem Turan (Goethe University Frankfurt)

Since 2018	Iryna Schommartz (Goethe University Frankfurt) [04/2020 – 04/2021 in parental leave]
2013 – 2018	Laurel Raffington (Humboldt-Universität zu Berlin) <i>Winner of the Otto Hahn Medal from Max Planck Society for outstanding dissertation;</i> <i>Winner of the Margret-und-Paul-Baltes Prize for outstanding dissertation</i>
2012 – 2015	Garvin Brod (Humboldt-Universität zu Berlin) <i>Winner of the Otto Hahn Medal from Max Planck Society for outstanding dissertation</i>
2008 – 2012	Yana Fandakova (Humboldt-Universität zu Berlin) <i>Winner of the Otto Hahn Medal from Max Planck Society for outstanding dissertation</i>