

Curriculum Vitae

1. Personal Information

Full Name: Dr. phil. Lea Maria Bartsch
Citizenship: German
OrcID: 0000-0001-7640-9193; Link to [Google Scholar](#)



Education

10/2010 – 07/2013 B.Sc. (Psychology) at Technical University Dresden
Title of B.Sc. Thesis: Pop into Mind - How automatic is prospective memory?
09/2013 – 10/2015 M.Sc. (Psychology) at Technical University Dresden
Title of M.Sc. Thesis: *Mimicking effects of aging: The role of the left dorsolateral PFC in model-based learning in younger adults*
10/2015 – 10/2018 PhD (Psychology) at University of Zurich (Supervisor: Prof. Dr. Klaus Oberauer)
distinction: summa cum laude
Title of PhD Thesis: *Processes in Working Memory and Their Impact on Long-Term Memory Formation in Young and Older Adults*

Employment History

03/2014 – 01/2015 Student Assistant at Technical University Dresden in the Department of Lifespan Developmental Neuroscience (Supervisor Prof. Dr. Shu-Chen Li)
06/2015 – 07/2015
02/2015 – 05/2015 Research Intern at the Max-Planck-Institute for Human Development Berlin, CONMEM Group, Jacobs-Study of Child Development (Supervisor Dr. Yee-Lee Shing)
10/2015 – 10/2018 Doctoral Student (60%) at the University of Zurich in the the cognition lab and University Research Priority Program "Dynamics of Healthy Aging"
01/2018 – 04/2018 Visiting Doctoral Student at the University of Texas at Austin, Department: *LewPeaLab*, Department of Psychology
11/2018 – 31.07.2020 Post-Doctoral researcher (80%) in the cognition lab (Prof. Dr. Klaus Oberauer) at University of Zurich
08/2020 – today Academic Associate in the cognition lab (Prof. Dr. Klaus Oberauer) at University of Zurich

Approved research projects

09/2020 – 08/2021 UNIGE - UZH Joint Seed Funding for Collaboration in Research and Teaching 2020
"Why does free time make working memory better? Decoding memory control processes in the brain: Towards a Swiss-based collaboration (SwissMemDecoder)", with Prof. Evie Vergauwe, CHF 10'000
02/2022 – 01/2026 Swiss National Science Foundation – project funding (Nr. 100014_204289):
"Long-term working memory: leveraging prior knowledge to bypass working memory limitations", CHF 271'400
06/2022 – 08/2022 The Icelandic Centre for Research (Rannís) - Student Innovation Fund:
"Long-term memory and processing in working memory, Collaboration with Dr. Peter Shepherdson, CHF 7'568

Publications and Preprints (*related to the PhD)

Bartsch, L. M., Souza, A., & Oberauer, K. (2022, February 7). The benefits of memory control processes in working memory: comparing effects of self-reported and instructed strategy use. <https://doi.org/10.31234/osf.io/fzmr3>

Bartsch, L. M., & Oberauer, K. (2021, June 8). The contribution of episodic Long-term Memory to Working Memory for Bindings. <https://doi.org/10.31234/osf.io/a7w6x>

Bartsch, L. M., & Shepherdson, P. (2021). Freeing capacity in WM through the use of LTM representations. *Journal of Experimental Psychology: Learning, Memory, and Cognition*. <https://doi.org/https://doi.org/10.1037/xlm0001024>

Bartsch, L. M., & Oberauer, K. (2021). The effects of elaboration on working memory and long-term memory across age. *Journal of Memory and Language*, 118, 104215. <https://doi.org/10.1016/j.jml.2020.104215>

Bartsch, L. M., & Oberauer, K. (2020). Reactivated Visual Masks Do Not Disrupt Serial Recall. *Experimental Psychology*, 67(3), 178–185. <https://doi.org/10.1027/1618-3169/a000486>

von Bastian, C. C., Blais, C., Brewer, G. A., Gyurkovics, M., Hedge, C., Kałamała, P., ... Wiemers, E. A. (2020, July 27). Advancing the understanding of individual differences in attentional control: Theoretical, methodological, and analytical considerations. <https://doi.org/10.31234/osf.io/x3b9k>

*Bartsch, L. M., Loaiza, V. M., Jäncke, L., Oberauer, K., & Lewis-Peacock, J. A. (2019). Dissociating refreshing and elaboration and their impacts on memory. *NeuroImage*, 199, 585–597. <https://doi.org/10.1016/j.neuroimage.2019.06.028>.

Bartsch, L. M., & Oberauer, K. (2019, May 20). Adult age differences in refreshing and elaboration and their consequences for working memory and long-term memory. *PsyArXiv*. <https://doi.org/10.31234/osf.io/q76fy>

*Bartsch, L. M., Loaiza, V. M., & Oberauer, K. (2018). Does Limited Working Memory Capacity Underlie Age Differences in Associative Long-Term Memory? *Psychology and Aging*. <https://doi.org/10.1037/pag0000317>

*Bartsch, L. M., Singmann, H., & Oberauer, K. (2018). The effects of refreshing and elaboration on working memory performance, and their contributions to long-term memory formation. *Memory and Cognition*, 46(5), 1–13. <https://doi.org/10.3758/s13421-018-0805-9>

Wittkuhn, L., Eppinger, B., Bartsch, L. M., Thurm, F., Korb, F. M., & Li, S.-C. (2017). Repetitive transcranial magnetic stimulation over dorsolateral prefrontal cortex modulates value-based learning during sequential decision-making. *NeuroImage*, 167. <https://doi.org/10.1016/j.neuroimage.2017.11.057>

Supervision of junior research at graduate and postgraduate level

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| <i>Ongoing</i> | Supervisor of PhD Thesis “Long-term working memory” (Ana Rodriguez at University of Zurich) |
| <i>Ongoing</i> | Supervisor of PhD Thesis “Age differences in the interplay between working memory and long-term memory” (Joscha Dutli at University of Zurich and URPP Dynamics of Healthy Aging) |
| <i>Ongoing</i> | Co-supervisor of PhD Thesis “The relationship between source monitoring and working memory” (Suaad Said Al Hadhrami at University of Zurich) |

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| <i>Ongoing</i> | Co-supervisor of M.Sc. Thesis “Can we detect the neural signatures of refreshing?” (Stéphanie Jeanneret at University of Geneva) |
| 01/2021 | First Supervisor of M.Sc. Thesis “What determines the elaboration benefit in long-term memory?” (submitted by Joscha Dutli at University of Zurich) |
| 01/2020 | First Supervisor of B.Sc. Thesis “Neurophysiologische Parameter von Arbeitsgedächtnisprozessen - Ursachen der limitierten Kapazität” (submitted by Gary Hoppeler at University of Zurich) |
| 01/2020 | First Supervisor of B.Sc. Thesis “Wie MVPA von fMRT Daten dabei helfen kann, den Zusammenhang von Arbeitsgedächtnisprozessen und Aufmerksamkeit besser zu verstehen” (submitted by Atalía Adank at University of Zurich) |
| 07/2019 | Second Supervisor of M.Sc. Thesis “Complex Span versus Brown-Peterson A Comparison” (submitted by Ilahé Samadi at University of Zurich) |

Prizes, awards, fellowships

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| 10/2015 | <i>Werner-Straub-Award</i> for outstanding achievements in the context of scientific qualification, presented by the department of Psychology at the Technical University Dresden. |
| 11/2017 | Travel Award of the SAGW for the participation of the 58 th Annual Meeting of the Psychonomic Society in Vancouver, Canada |
| 11/2019 | Travel Award of the SAGW for the participation of the 60 th Annual Meeting of the Psychonomic Society in Montreal, Canada |
| 11/2020 | Recognition "Teacher of the Hour" for the special achievements during the outbreak of the corona crisis in the spring semester 2020 |
| 10/2021 | 3 rd prize of the Dissertation award of the General Psychology Section of the German research Foundation (DFG) |

Teaching activities

Lectures

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| 02/2021– 07/2021 | “Kognitionspsychologie 1” (B.Sc.) at University of Zurich <i>shared teaching with Dr. Gidon Frischkorn</i> |
| 09/2019 – 12/2019 | “Kognitionspsychologie 2” (B.Sc.) at University of Zurich <i>shared teaching with Dr. Gidon Frischkorn</i> |

Seminars

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| 02/2021 – 05/2021 | “Experimentalpsychologisches Praktikum” (B.Sc.) at University of Zurich <i>shared teaching with MSc. Philipp Musfeld</i> |
| 09/2021 – 12/2020 | “Cutting Edge Research in Human Cognition” (M.Sc.) at University of Zurich <i>shared teaching with Dr. Gidon Frischkorn</i> |
| 09/2020 – 12/2020 | “Investigating and measuring Working Memory Processes” (M.Sc.) at University of Zurich <i>shared teaching with Dr. Gidon Frischkorn</i> |
| 02/2020 – 05/2020 | “Cutting Edge Research in Human Cognition” (M.Sc.) at University of Zurich <i>shared teaching with Dr. Gidon Frischkorn</i> |
| 02/2019 – 05/2019 | “Cutting Edge Research in Human Cognition” (M.Sc.) at University of Zurich |
| 02/2018 – 05/2018 | “Cutting Edge Research in Human Cognition” (M.Sc.) at University of Zurich <i>shared teaching with Dr. Peter Shepherdson</i> |
| 09/2016 – 12/2016 | “From Empirical Questions to Scientific Proof” (M.Sc.) at University of Zurich <i>shared teaching with Dr. Alessandra Souza</i> |

Institutional responsibilities

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| 12/2014 – 11/2015 | Spokesperson and elected member of the student representatives |
| 11/2013 – 11/2014 | Elected member of the student representatives |

Scientific reviewing activities

11/2018 – today Ad-hoc reviewer for: Acta Psychologica; Brain Sciences; Cognitive Processing; Journal of Cognitive Psychology; Journal of Experimental Psychology: Learning, Memory and Cognition; Journal of Memory and Language; Memory; Memory & Cognition; PlosOne; Psychology and Aging; Quarterly Journal of Experimental Psychology

Active memberships in scientific societies, fellowships in renowned academies

09/2017 – today Member of the [European Society of Cognitive Psychology](#) (ESCoP)

01/2017 – today Member of the [Psychonomic Society](#)