#### CURRICULUM VITAE

# CHRISTOPHER L. ZERR

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Expected August 2021

#### **EDUCATION**

Ph D Washington University in St Louis

|     | 111.2.  | Psychological & Brain Sciences Advisor: Kathleen B. McDermott Dissertation: Examining individual differences in forgetting from long-t Committee: Mark A. McDaniel, Ian G. Dobbins, Michael J. Strube, Car | •        | .021 |
|-----|---------|--|----------|------|
|     | A.M.    | Washington University in St. Louis Psychological & Brain Sciences  |          | 2017 |
|     | B.Sc.   | Truman State University Psychology with Honors, Statistical Methods Valedictorian, Summa Cum Laude   | 2        | 2015 |
| Aw. | ARDS &  | & HONORS   |          |      |
|     | Ameri   | can Psychological Association Dissertation Award   | 2        | 2020 |
|     | AAAS    | /Science Program for Excellence in Science   | ,        | 2019 |
|     | Ameri   | can Psychological Foundation COGDOP William C. Howell Scholarship  | ) 2      | 2018 |
|     | Nation  | al Science Foundation Graduate Research Fellowship Program (GRFP)  | Award 2  | 2016 |
|     | Omicro  | on Delta Kappa Student Hall of Fame  | 2        | 2014 |
|     | Truma   | n Leadership Full-Ride Scholarship   | 2011 - 2 | 2015 |
|     | Missou  | uri Bright Flight Scholarship  | 2011 - 2 | 2015 |
|     | Preside | ent's List, Truman State University  | 2011 - 2 | 2015 |
|     |         |  |          |      |

#### **PUBLICATIONS**

- Shaffer, F., Meehan, Z. M., & Zerr, C. L. (2020). A critical review of ultra-short-term heart rate variability norms research. *Frontiers in Neuroscience*, 14, 1-11.
- McDermott, K. B., & **Zerr, C. L.** (2019). Individual differences in learning efficiency. *Current Directions in Psychological Science*, *28*, 607-613.
- **Zerr, C. L.**, Berg, J. J., Nelson, S. M., Fishell, A. K., Savalia, N. K., & McDermott, K. B. (2018). Learning efficiency: Identifying individual differences in learning rate and retention in healthy adults. *Psychological Science*, *29*, 1436-1450.

Thrailkill, E. A., Trott, J. M., **Zerr, C. L.**, & Bouton, M. E. (2016). Contextual control of chained instrumental behaviors. *Journal of Experimental Psychology: Animal Learning and Cognition*, 42(4), 401-414. http://dx.doi.org/10.1037/xan0000112

- Shaffer, F., & **Zerr, C. L.** (2016). Depressive Disorders. In G. Tan, F. Shaffer, R. Lyle, & I. Teo (Eds.), *Evidence-based practice in biofeedback and neurofeedback* (3rd ed.) (pp. 57-61). Wheat Ridge, CO: Association for Applied Psychophysiology and Biofeedback.
- Shaffer, F., McCraty, R., & **Zerr, C. L.** (2014). A healthy heart is not a metronome: An integrative review of the heart's anatomy and heart rate variability. *Frontiers in Psychology*, 5, 1-19. doi: 10.3389/fpsyg.2014.01040

#### MANUSCRIPTS SUBMITTED

**Zerr, C. L.**, Spaventa, T., & McDermott, K. B. (submitted). Are efficient learners of verbal stimuli also efficient learners of visuospatial stimuli?

#### MANUSCRIPTS IN PREPARATION

- Zerr, C. L., & McDermott, K. B. (in prep). Learning rate predicts forgetting rate.
- Zerr, C. L., Anderson, N. L., Shaffer, R. A., Gilmore, A. W., & McDermott, K. B. (in prep). Characterizing activity in the parietal memory network during a continuous recognition task.

#### **PRESENTATIONS**

- **Zerr, C. L.** (2020). How the rate we learn relates to the rate we forget. Invited talk at the Cognitive, Computational, and Systems Neuroscience [CCSN] retreat at Washington University in St. Louis, MO.
- **Zerr, C. L.**, & McDermott, K. B. (2018). *Quick to learn, slow to forget: Faster learners retain more*. Poster presented at the 2018 Psychonomic Society Annual Meeting in New Orleans, LA.
- Zerr, C. L. (2018). Learning rates and forgetting rates (...and testing effect confounds). Talk presented at the Washington University in St. Louis Behavior, Brain, and Cognition datablitz in St. Louis, MO.
- **Zerr, C. L.** (2017). *Learning efficiency*. Talk presented at the Washington University in St. Louis Behavior, Brain, and Cognition datablitz in St. Louis, MO.
- **Zerr, C. L.** (2015). *Investigating psychometric properties of a learning efficiency task within healthy young adults*. Talk presented at the Washington University in St. Louis Behavior, Brain, and Cognition datablitz in St. Louis, MO.
- **Zerr, C. L.**, & Bouton, M. E. (2014). *Role of context in controlling performance and extinction of a heterogeneous behavior chain*. Poster presented at the University of Vermont Summer Neuroscience Undergraduate Research Fellowship Symposium, Burlington, VT.

**Zerr, C. L.**, Fluty, E., & Cangelosi, A. (2014). *Are blanketing and stem artifacts real?* Poster presented at the 2014 Biofeedback Federation of Europe international conference, Venice, Italy.

- **Zerr, C. L.**, Fluty, E., & Cangelosi, A. (2014). *Inhalation-to-exhalation ratio affects HRV training success*. Poster presented at the 2014 Biofeedback Federation of Europe international conference, Venice, Italy.
- **Zerr, C. L.**, & Allen, J. (2014). *The use of device-guided breathing in the treatment of hypertension: A meta-analytic review*. Poster presented at the Truman State University Psychological Research Capstone Symposium, Kirksville, MO.
- **Zerr, C. L.**, Bussen, S., & Nyquist, E. (2014). *Meanings and values of "better" and "worse" moods*. Poster presented at the Truman State University Student Research Conference, Kirksville, MO.
- **Zerr, C. L.** (2013). Galectin-3 inhibition reduces TGF-B1-induced structural and electrical of the atria during persistent atrial fibrillation in sheep. Paper presented at the University of Michigan Cardiovascular Summer Research Fellowship Symposium, Ann Arbor, MI.
- **Zerr, C. L.** (2013). Can heartfelt emotion attenuate the autonomic effects of a math stressor? Paper presented at the 2013 Association for Applied Psychophysiology and Biofeedback national conference, Portland, OR.
- **Zerr, C. L.** (2013). Can heartfelt emotion facilitate autonomic recovery from a math stressor? Paper presented at the 2013 Association for Applied Psychophysiology and Biofeedback national conference, Portland, OR.
- **Zerr, C. L.** (2013). Do the left and right hands differ in responsiveness to experimental stressors? Paper presented at the 2013 Association for Applied Psychophysiology and Biofeedback national conference, Portland, OR.
- **Zerr, C. L.** (2012). Does adding heartfelt emotion to resonance frequency breathing increase heart rate variability? Paper presented at the 2012 Association for Applied Psychophysiology and Biofeedback national conference, Baltimore, MD.
- **Zerr, C. L.** (2012). *Does heartfelt emotion increase heart rate variability?* Paper presented at the 2012 Association for Applied Psychophysiology and Biofeedback national conference, Baltimore, MD.
- **Zerr, C. L.** (2012). Can ujjayi breathing increase the effectiveness of 6-bpm heart rate variability training? Paper presented at the 2012 Association for Applied Psychophysiology and Biofeedback national conference, Baltimore, MD.

#### RESEARCH EXPERIENCE

| Memory and Cognition Laboratory, Washington University in St. Louis<br>Graduate Student<br>PI: Kathleen B. McDermott, PhD | 2015 – Present |
|---|----------------|
| Center for Applied Psychophysiology, Truman State University Laboratory Manager PI: Fredric Shaffer, PhD                  | 2011 – 2015    |
| Clinical Psychosocial Laboratory, Truman State University Undergraduate Researcher PI: Jeffrey R. Vittengl, PhD           | 2013 – 2015    |

| Learning and Behavioral Neuroscience Laboratory, University of Ve<br>Summer Neuroscience Undergraduate Research Fellowship<br>PI: Mark E. Bouton, PhD  | ermont Summer 2014   |  |  |
|--|--|--|--|
| Center for Arrhythmia Research, University of Michigan<br>Undergraduate Research Fellow<br>PI: José Jalife, MD   | Summer 2013  |  |  |
| PROFESSIONAL EXPERIENCE  |  |  |  |
| Center for Applied Statistics and Evaluation (CASE), Statistical Con<br>Truman State University<br>Supervisors: Hyun-Joo Kim, PhD, and Scott Alberts, PhD  | sultant 2012 – 2015  |  |  |
| TEACHING EXPERIENCE  |  |  |  |
| Teaching Assistant   |  |  |  |
| Human Memory and Learning, Washington University in St. Cognitive Neuroscience, Washington University in St. Louis Experimental Psychology, Truman State University Psychological Research Capstone, Truman State University               |  |  |  |
| MENTOR EXPERIENCE  |  |  |  |
| Kira Harris Project title: Parietal memory network activity during a conti   | 2020 – 2021<br>nuous recognition task  |  |  |
| Heather Elliott  Honors thesis: Beliefs about how sleep affects memory impaction (JOLs): Evidence that people can make belief-based JOLs   | Honors thesis: Beliefs about how sleep affects memory impact judgments of learning |  |  |
| Hannah C. Becker, current Psychology PhD student at the University Honors thesis: Individual differences in efficient learning: The attentional control and working memory capacity  |  |  |  |
| Justin Vincent Honors thesis: Learning efficiency: Is it generalizable? Is it d  | 2015 – 2018<br>urable?   |  |  |
| STUDENT INVOLVEMENT  |  |  |  |
| AAAS, Student Member Psychological & Brain Sciences Faculty Search Committee, Student Psychonomic Society, Student Member Association for Psychological Science, Student Member Dean's Student Advisory Committee, Truman State University | 2019 – Present<br>2018<br>2015 – Present<br>2014 – Present<br>2014 – 2015          |  |  |

| Vice President of Academic Affairs Ambassador                | 2014        |
|--|-------------|
| Psi Chi International Honor Society in Psychology, President | 2013 - 2015 |
| Order of Omega, Greek Leadership Society                     | 2014        |
| National Society of Collegiate Scholars                      | 2012        |

#### TECHNICAL & COMPUTER SKILLS

Expertise with R, SPSS, JASP, GraphPad Prism, Microsoft Office, Apple iWork; proficiency in coding with JavaScript, jsPsych, MySQL, HTML/PHP, Python, PsychoPy; competence in MATLAB, AFNI fMRI analysis software.

#### PROFESSIONAL REFERENCES

### Kathleen B. McDermott, PhD, Professor of Psychological & Brain Sciences, Radiology

Department of Psychological & Brain Sciences, Radiology

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Email: kathleen.mcdermott@wustl.edu

## Henry L. Roediger, III, PhD, James S. McDonnell Distinguished University Professor

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# Mark A. McDaniel, PhD, Professor of Psychological & Brain Sciences, Director of the Center for Integrative Research on Cognition, Learning, and Education (CIRCLE)

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# Mark E. Bouton, PhD, Professor of Psychology, Assistant Director for the Neuroscience Graduate Program

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